WIN ONEDOTZERO DVDS, BOOKS AND FESTIVAL TICKETS • PLUS FREE SOFTWARE ON THE CD WORTH $695!

COMPUTER arts projects

THE IN-DEPTH GUIDE FOR DIGITAL CREATIVES

MOTION GRAPHICS SPECIAL

MAKE YOUR IMAGES MOVE!

100 PAGES OF TUTORIALS, TIPS AND FEATURES SHOWING YOU HOW TO:

- **Design** cool title sequences
- **Create** a broadcast-ready TV ident
- **Master** 3D layers in After Effects
- **Make** your DV look like film
- **Choose** the right video format

PLUS

DVD DESIGN SECRETS
The Pavement on how it created the DVD motion menus for Little Britain

MOTION ARTISTS IN PROFILE
Minivegas, Loyalkaspar, Umeric and Clusta share their design skills

FREE CD INSIDE

CINELOOK 1.9 (MAC OSX/PC)

FULL AFTER EFFECTS PLUG-IN WORTH $695!

MAKE YOUR DV FOOTAGE LOOK *LIKE FILM WITH THIS EXCLUSIVE* FREE SOFTWARE!

ISSUE 72 JUNE 2005 £6

future publishing Media with passion

9 771740 900004 06

UK edition • Printed in the UK

We've all gotten one – the last-minute project no one else would accept because it's beneath even the skill-set of earthworm DNA. If only there was some way to have fun with it, to give it some sense of good design.

Well, with QuarkXPress® 6.5, there is.

It all begins with features made to give you creative freedom – instead of annoying limitations. Features such as:

- Layers (create, reorder, lock, show, hide and assign objects to layers at will)
- PSD Import (import and integrate native Photoshop® files directly into layout)
- Excel table, chart and graphic import (create and update automatically)
- QuarkVista™ (blur, colour-correct and optimise images right in your document)
- Multiple Undos (correct up to 30 pre-coffee experiments gone wrong, with ease)

Best of all, if you've ever used QuarkXPress, you'll know how to use QuarkXPress 6.5. No tedious learning curve. No time-wasting fumbling for shortcut keys. And quite simply, no compromise.

Why wait? QuarkXPress 6.5 is available for OS X and Windows XP. Purchase yours now for only **£679** (£797.83 incl. VAT) or upgrade for only **£199** (£233.83 incl. VAT). Just visit **eurostore.quark.ch** before 30th June 2005 and enter Key Code K211.

QuarkXPress 6.5. What's your story?
We'd like to hear about your most unexpected, tortured or downright bizarre project. We'll be featuring the best examples in print and on the web. E-mail yours to: yourstory@quark.com

QUARK®

euro.quark.com
00800 1787 8275 or
0041 32 720 1414
7.30 a.m. to 4.30 p.m. GMT

This offer is only valid for purchases made through Quark customer service. Customer is responsible for all taxes, shipping, and handling. This offer is only valid to upgrade QuarkXPress International English versions 3, 4, or 5 registered and used in Europe. This offer is not valid for any other upgrades or products, and cannot be used in combination with any other offer or discount. This offer cannot be applied to previously purchased products. Other offers may apply to additional upgrades. Contact Quark for more information.

This offer expires 30/06/2005. ©2005 Quark, Inc. and Quark Media House, Sàrl, Switzerland. All rights reserved. Quark, the Quark logo, QuarkXPress, and QuarkXPress Passport are trademarks of Quark Inc, and all applicable affiliated companies, Reg. U.S. Pat. & Tm. Off. and in many other countries. QuarkVista is a trademark of Quark Inc., and all applicable affiliated companies. All other marks belong to their respective owners.

Prices do not include shipping or applicable customs duties. Please visit our Web site at euro.quark.com/en/products/xpress/purchase/shipping for additional information regarding VAT, shipping costs, and customs duties.

COMPUTER arts projects

Subscriptions – page 70
Future Publishing Ltd, FREEPOST RLSC-SXSE-SKKT, Unit 4 Tower House, Sovereign Park, Market Harborough, Leicestershire LE16 9EF
[t] UK orders and renewals: 0870 837 4722
[t] UK subscription queries: 0870 837 4773
[t] Overseas orders: +44 (0)185 843 8794
[e] computerartsproj@subscription.co.uk

Editorial [t] 01225 442 244
Rob Carney associate editor
[e] robert.carney@futurenet.co.uk
Johann Chan designer
[e] johann.chan@futurenet.co.uk
Ashley Young production editor
[e] casproduction@futurenet.co.uk
Matt Gallimore senior CD editor
[e] matt.gallimore@futurenet.co.uk
Simon Holland CD editor
[e] simon.holland@futurenet.co.uk
Sarah Williams software copyright co-ordinator

CD problems [t] 01225 822 743
Technical support: ca.support@futurenet.co.uk

Contributors
Cover image: Studio Output
Contributors: Rob Chiu, Christian Darkin, GR/DD, Dom Hall, Simon Holland, Christopher Kenworthy, Elton McAleer, Mark Penfold, Perception, Ed Ricketts, Viagrafix, Daniel West, James Wignall, Ashley Young

Printed at: BGP

Contact
Computer Arts Projects, Future Publishing, 30 Monmouth Street, Bath BA1 2BW
[t] 01225 442 244 [f] 01225 732 295
[i] ISDN: 01225 789 293
[w] www.computerarts.co.uk

Advertising [t] 01225 442 244
Lee Haines key account manager
[e] lee.haines@futurenet.co.uk
George Lucas senior sales executive
[e] george.lucas@futurenet.co.uk
Rebecca Bell-Robinson classified enquiries
[e] rebecca.bell-robinson@futurenet.co.uk
Rosa Smith advertising manager
[e] rosa.smith@futurenet.co.uk

Production
Mark Anson production coordinator
[e] mark.anson@futurenet.co.uk

International licensing
Simon Wear international director
[e] simon.wear@futurenet.co.uk
[t] +44 (0) 1225 442 244

Management
Kelley Corten publisher
Dom Beaven publishing director
Gillian Carson senior editor
Roddy Llewellyn senior art editor

Distributed by
Marketforce (UK) Ltd
5th Floor, Low Rise Building, Kings Reach Tower, Stamford Street, London, SE1 9LS
[t] +44 (0) 20 7633 3333

Jason Comber trade marketing manager
[e] jason.comber@futurenet.co.uk

Future plc
Roger Parry non-executive chairman
Greg Ingham chief executive
John Bowman group finance director
Robert Price managing director

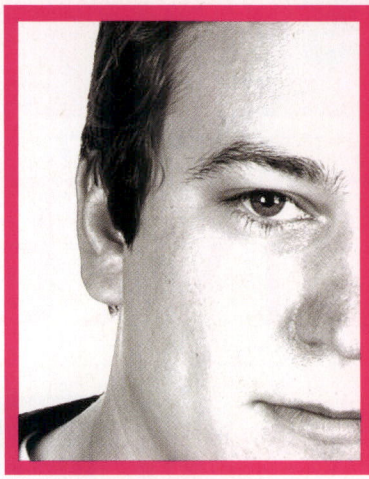
All rights reserved. All trademarks and copyrights in this issue are recognised, and are acknowledged where possible. If we have failed to credit your copyright then do please contact us – we'll happily correct any oversight. Any material submitted is accepted on the basis of a worldwide right to publish in printed or electronic form – be sure to clearly label all discs. All contents © 2005 Future Publishing Ltd.
Part of Future plc, which has offices in Bath, London, Milan, New York, Paris, San Diego and San Francisco.

Future Publishing Ltd is part of Future plc.

Future produces carefully targeted special-interest magazines for people who share a passion. We aim to satisfy that passion by creating titles offering value for money, reliable information, smart buying advice and which are a pleasure to read. Today we publish more than 100 magazines in the UK, US, France and Italy. Over 100 international editions of our magazines are also published in 30 other countries across the world.
Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR). · Non-executive Chairman: Roger Parry · Chief Executive: Greg Ingham · Group Finance Director: John Bowman · Tel +44 1225 442244 · www.futureplc.com

ABC Computer Arts Projects is a member of the Audit Bureau of Circulations Jan-Dec 2004: **12,719**

Welcome



Motion graphics is an art that often takes the back seat in professional design, losing out to the tactility of print and the accessibility of the web. But it's no less important – in fact, it's very much part of our everyday lives. Think of the last TV ident you saw which made you laugh, or simply wonder how it was done; or the last time you went to the cinema and saw a title sequence that was better than the movie itself. The fact is that motion graphics work is all around us, and it's an exciting medium to work in.

If you don't believe me, just flick through the pages of the mag you're holding. The sheer diversity, graphics talent and ingenuity of the work proves that motion is here to stay in a big way. Once you're suitably inspired, take the time to work through our range of tutorials – you'll learn everything from how to create a stunning 3D title sequence to a broadcast-ready TV ident. You'll also find out how to use this month's free software: *Cinelook 1.9*, a tool for making your video footage look like film. Turn over for this issue's full contents...

Rob Carney, Associate Editor
rob.carney@futurenet.co.uk

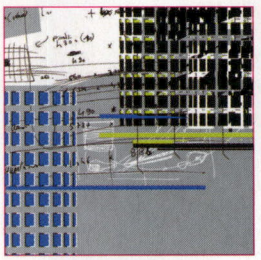
Contributing creatives

COVER IMAGE

Studio Output

Responding to our brief to produce a dynamic, contemporary vision of movement, award-winning Nottingham-based designers Studio Outfit conjured up this piece of Parkour brilliance. Check out the company's website below for more details on its latest work...

[w] www.studio-output.com



GR/DD

Multi-talented design and communication company GR/DD bring our features to life this month with two stunning and thought-provoking illustrations. Turn to pages 12 and 18 to see them.

[w] www.grdd.com

Viagrafik

German design studio Viagrafik does everything from creating motion graphics to designing entire rooms. And this month it's created two illustrations for us. See them on pages 54 and 88.

[w] www.viagrafik.com

Rob Chiu

Rob Chiu of The Ronin fame shares the secret of how to create stunning title sequences using Adobe *After Effects* in our two expert tutorials, beginning on page 24.

[w] www.theronin.co.uk

Perception

New York based studio Perception is taking the motion graphics world by storm. Learn how you can too as the company dishes out invaluable motion graphics tips, beginning on page 18.

[w] www.perceptv.com

Tell us what topics you'd like to see covered in-depth in *Computer Arts Projects*. Contact us on:
[e] rob.carney@futurenet.co.uk

We're always on the lookout for new artists as well as established creatives – so if you're interested in contributing to the magazine, please send some examples of your work to **[e] johann.chan@futurenet.co.uk**

COMPUTER arts projects

CONTENTS

IN-DEPTH GUIDE

TUTORIALS

Create a sharp title sequence 24
Moving titles in 3D 30
Create a TV ident 44
Digital celluloid 76

FEATURES

Showcase 06
Design in motion 12
30 motion graphics tips 18
Idents parade 40
DVD menus 54
Formats demystified 64
Motion graphics kit 82

PROFILES

Minivegas 36
Umeric 50
Loyalkaspar 60
Clusta 72

SUBSCRIBE

Subscription offer 70
International subscriptions 39

REGULARS

Competition 23
Back issues 63
Next month 94
CD contents 96

FEATURES

Showcase 06
Take a look at the best in contemporary motion graphics — courtesy of onedotzero

Design in motion 12
Get started in the world of motion graphics with our in-depth guide!

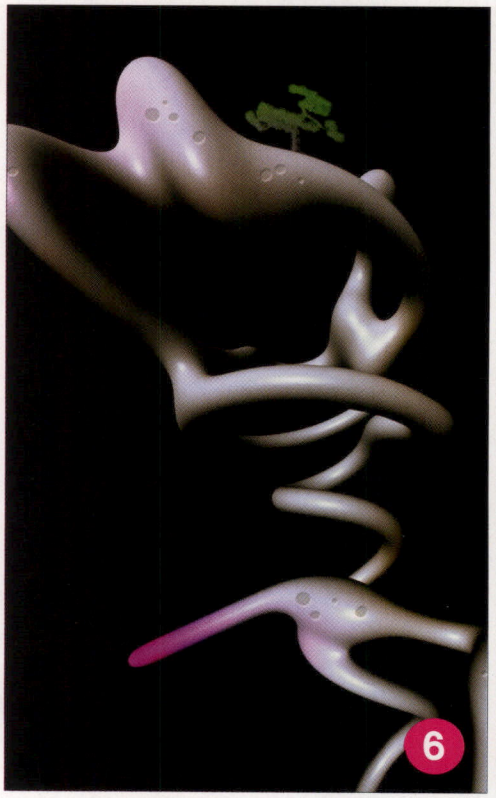
30 motion tips 18
Top motion studio Perception dishes out valuable motion graphics advice

Idents parade 40
We discover what it takes to make a TV ident and look at some of the best...

DVD menu design 54
Four of the hottest DVD design studios showcase their latest work and show you how to succeed in menu design

Formats demystified 64
Discover the pros and cons of the major video formats, and get your work seen by as many people as possible

Motion graphics kit 82
Want to become a motion graphics artist? You'll need the right kit for the job. We test essential hardware and software...



WIN DVDS, BOOKS AND FESTIVAL TICKETS!
PAGE 23

CINELOOK 1.9
FULL AFTER EFFECTS PLUG-IN WORTH $695!
SEE PAGE 98...

TUTORIALS

Create a sharp title sequence 24

Rob Chiu of The Ronin shows you how to create a stunning title sequence using *Photoshop*, *Illustrator* and *After Effects*

Moving titles in 3D 30

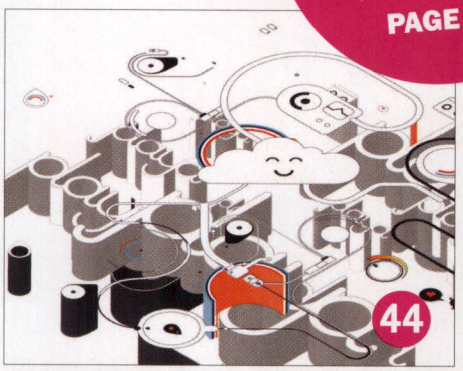
Take your title designs to the next dimension as Rob Chiu shows you the power of *After Effects 3D* functionality...

Create a TV ident 44

Plan, design and piece together a broadcast-ready TV ident and hone your animation skills along the way

Digital celluloid 76

Use your free *CineLook 1.9* software on the CD to make bog-standard DV footage look as though it's been shot on 35mm film!



PROFILES

Minivegas 36

From Keane to Live Aid, this London-based motion graphics collective has done it all in its relatively short lifetime...

Umeric 50

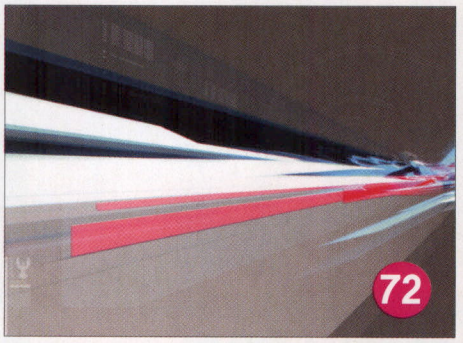
Anything but generic, Australian motion master Umeric shares its design secrets

Loyalkaspar 60

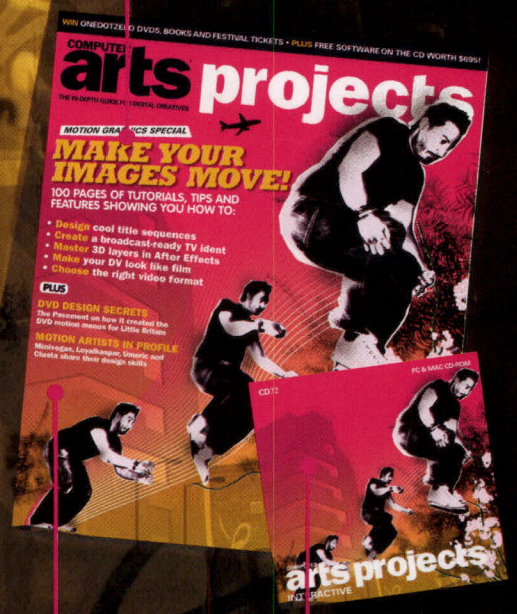
Started at Attik in the late 1990s, Loyalkaspar is a New York design firm at the very top of its game

Clusta 72

Clusta is a Birmingham-based design outfit that is intent on giving clients something they'll be remembered for...



12 **Make your images move!**
Everything you need to get started with motion graphics!


WIN ONEDOTZERO DVDS, BOOKS AND FESTIVAL TICKETS • PLUS FREE SOFTWARE ON THE CD WORTH $695!
COMPUTER arts projects
THE IN-DEPTH GUIDE FOR DIGITAL CREATIVES
MOTION GRAPHICS SPECIAL
MAKE YOUR IMAGES MOVE!
100 PAGES OF TUTORIALS, TIPS AND FEATURES SHOWING YOU HOW TO:
• Design cool title sequences
• Create a broadcast-ready TV ident
• Master 3D layers in After Effects
• Make your DV look like film
• Choose the right video format
PLUS
DVD DESIGN SECRETS
The Pavement on how it created the DVD motion menus for Little Britain
MOTION ARTISTS IN PROFILE
Minivegas, Loyalkaspar, Umeric and Clusta share their design skills
PC & MAC CD-ROM
CD 72
arts projects
INTERACTIVE

36 **Motion artists in profile**
The best motion graphics artists in the business share their secrets

96 **ON YOUR CD**

Cinelook 1.9
Make your DV look like film with this exclusive software, worth $695!

Video training
Discover the power of *After Effects* and *Boris RED*

Clips on disc
Where you see this logo in the issue, you'll find motion graphics clips on the CD

Motion graphics showreel

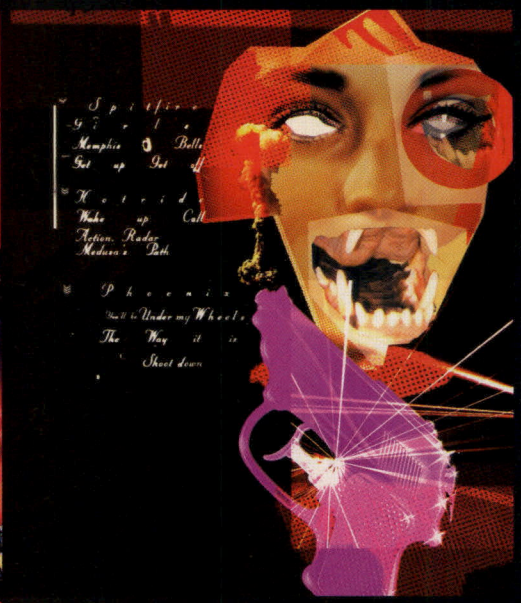
In this month's showcase, 11 contemporary moving-image makers exhibit their work...

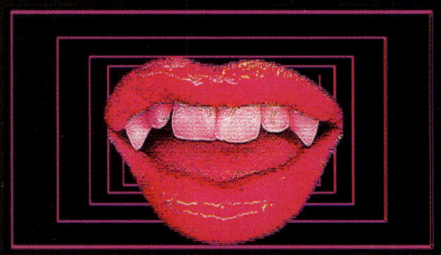
Intro

Intro was founded in 1988, and built its reputation on award-winning design and TV work for the music industry. A master of sleeve art, it has worked with Howie B, Roni Size and Depeche Mode, and designed the celebrated *XTRMNTR* sleeve art and music video for Primal Scream. Intro now has a broad client base which includes advertising agencies, corporate and arts organisations and government bodies. With work as varied as its clients' needs, Intro eschews any house styles, and embraces flexibility and individuality. War, disco, plague and not least propaganda are all referenced in Intro's cross-media campaign for The Prodigy's album *Always Outnumbered, Never Outgunned* including an explosive music video for the *Girls* single.
[w] www.intro-uk.com

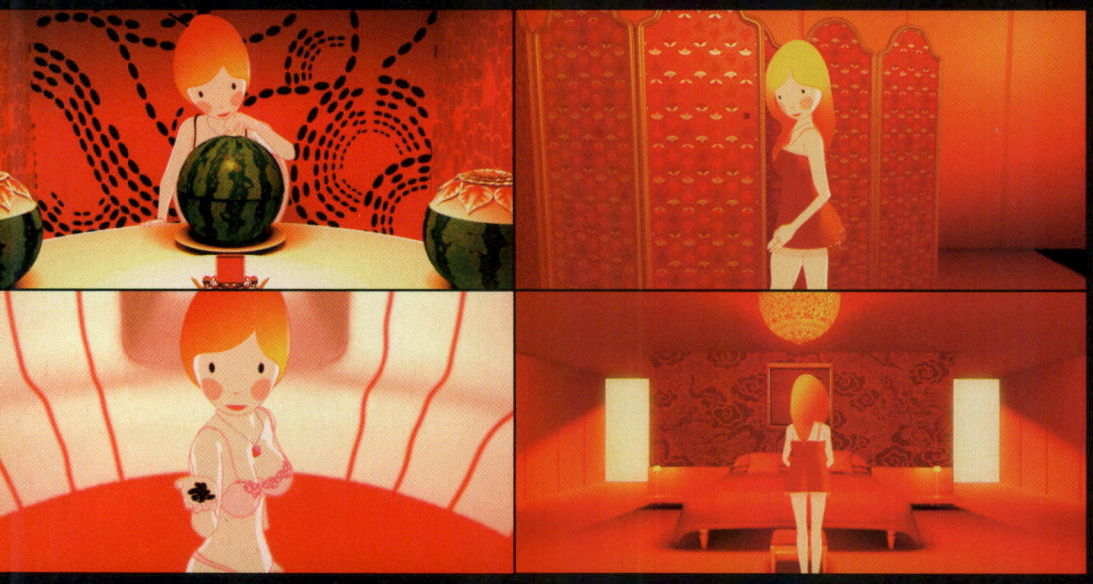
Right: Intro's powerful video for the Prodigy's first single from *Always Outnumbered, Never Outgunned*.

Credit: The Prodigy *Girls* music video
Director: Cook + House @ Intro
XL Recordings





on the CD



Woof Wan-Bau

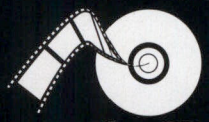
Joji Koyama, aka Woof Wan-Bau, has a strong background in design, illustration and experimental filmmaking. After graduating from Goldsmiths, Woof directed the promo video for Four Tet's *My Angel Rocks Back and Forth*, which won him a Young Gun Award for best animated music video and more recently a public choice nomination for the British Animation Awards. His strong filmmaking style uses elements of computer-generated graphics, live action and innovative post-production techniques with a quirky twist, prodding at our perceived notions of reality. Woof's animated short film for Channel 4's MESH project, *Watermelon Love*, is an unsettling yet beautiful look at strange desires in an online world.
[w] www.nexuslondon.com

Left: Find out what it's like to have a night in with a watermelon in Woof Wan-Bau's desirable short film.

on the CD

On your CD

Where you see this logo, you'll find a clip of the depicted showreel on the *Computer Arts Projects* CD73.



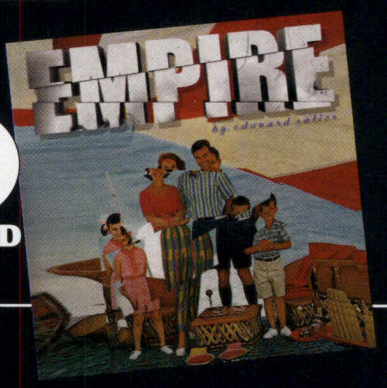
In association with onedotzero

onedotzero returns to London's ICA from 27 May to 5 June with its ninth flagship festival of progressive moving image, before touring to over 60 cities around the world. The festival brings together creative talent across graphic design, filmmaking, music video, computer gaming, Japanese animation, live performance and club visuals. Highlights include: two stunning unseen Korean animated features; a selection of future anime masterpieces; ten interactive designers curated by 2004's Designer of the Year Daniel Brown; Pete Fowler and James Jarvis in a monster DJ extravaganza, and a celebration of legendary designer-turned-director Mike Mills. All the artists featured on these pages will take part in onedotsero9. You can find out more about the festival at [w] www.onedotzero.com.

Edouard Salier

Currently a key figure on the super-cool Parisian audiovisual scene, Edouard Salier has created and directed a wide range of experimental graphic works, including short films, promos, TV idents, installations and fashion shows. His early record sleeve designs for French producer Dr L were soon followed by music videos for underground Cuban group Orishas and the Parisian AV collective Kaktus Hunters. Salier's absorbing take on the American Dream, *Empire*, takes the viewers' subconscious on a chilling journey, overlaying idyllic images of American utopia with subtle distortion masks that slowly reveal themselves to be advancing military hardware.
[w] www.autourdeminuit.com

Left and right: The American Dream is shattered in *Empire*.



Lynn Fox

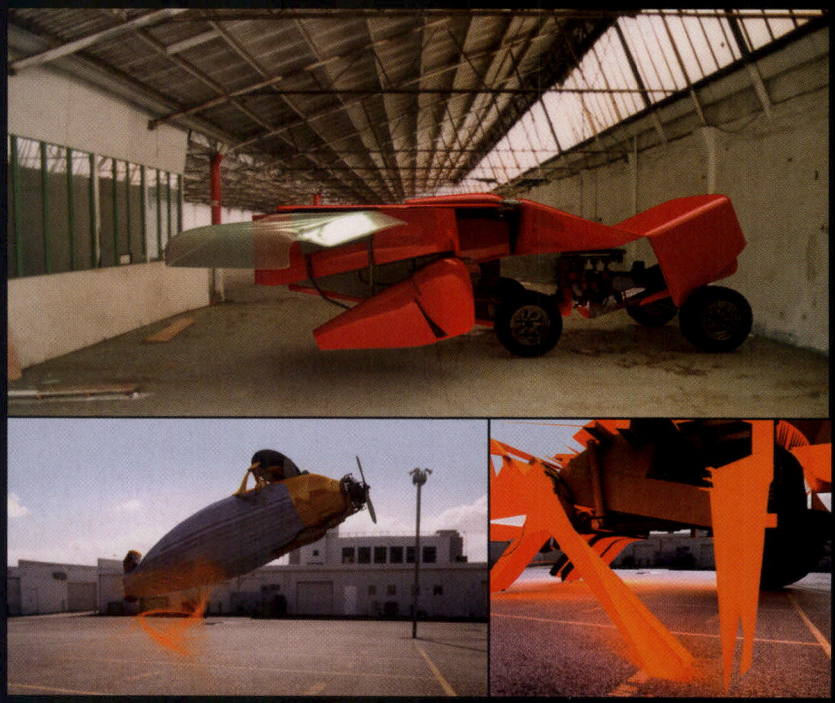
Architecturally trained trio Bastian Glassner, Chris McKenzie, Patrick Chen formed Lynn Fox in 2001 and burst onto the music promo scene in 2002 with their stunning promo for FC Kahuna's *Hayling*. This was followed by music promos for Incubus, ads for Boss and Yohji Yamamoto and the award-winning *Nature is Ancient* promo for Björk, who commissioned Lynn Fox to produce visuals for her world tour and subsequently the 2004 Olympics. Taken from this programme, *Oceania* is a lush underwater journey through a multitude of delicate forms that pulsate and pirouette, mixing subtle digital elements with live action.
[w] www.lynnfox.co.uk

Right: Björk's Oceania video includes multi-layered waves of imagery.

Zeitguised

Self-styled purveyors of "busy motion graphics, unacceptable architecture and obnoxious fashion," Zeitguised are Stuttgart-based Jamie Raap and Henrik Mauler. Their explorations into motion graphics break down conventional notions of form and structure, providing an outlet for their interests in architecture, sculpture, science and design, while serving as "the transformation catalyst for the 4D surrealism that you think is the world you live in." In Funktorung's *The Zoo* music video, Zeitguised used 3D animation software and its ability to perform complex boolean operations to put cars, planes, boats and other vehicles through radical decomposition and reconstruction processes, transforming them into bold, unpredictable, techno-organic objects.
[w] www.zeitguised.com

Right: See a variety of endangered vehicles in *The Zoo* music video.



on the CD

Shynola

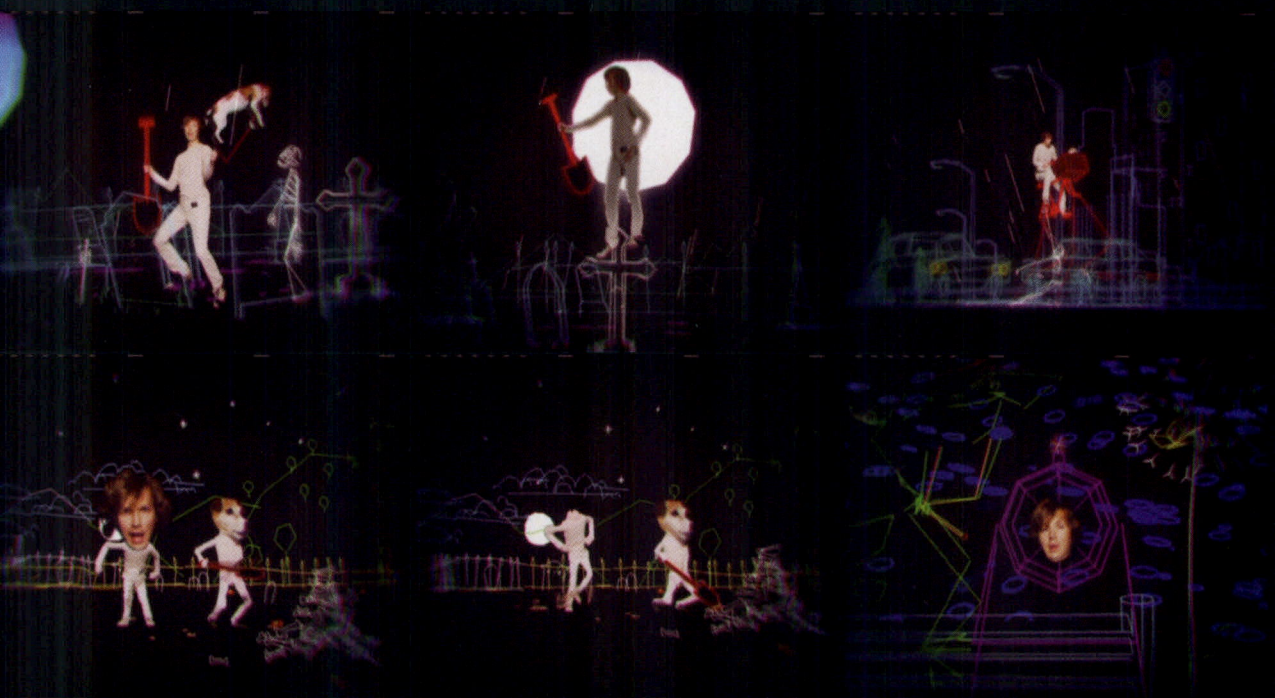
Renowned for displaying an almost chameleon-like ability to change styles from project to project, Shynola has established itself as a highly regarded and innovative force in the animation world. Conceived at the College of Art in Maidstone by Gideon Baws, Jason Groves, Chris Harding and Richard 'Kenny' Kenworthy, the quartet has produced a diverse body of work that includes music videos for Beck, Radiohead, UNKLE, Queens of the Stone Age, and Blur. The twisted, surreal visuals and unique narratives are an advertisers dream, and have translated into successful campaigns for Nike Presto and Sony PlayStation.
[w] www.shynola.com

Right: Shynola's electrifying new promo for the latest Beck single.

Logan

As Logan, Alexi Tylevich and Ben Conrad have fast become one of the hippest design groups in the USA, and their bold, adventurous imagery can be seen in work for clients such as Money Mark, Jurassic 5 and DKNY. Seeing it as the duty of designers to push the boundaries of design forward and react against all that is safe and established, they seek to grow their clients' visions into ground-breaking graphic concepts. Logan's latest project is the organic and illustrative onedotzero9 identity. The duo responded to the hybrid and interdisciplinary nature of the festival, creating an intricately beautiful trailer that is "biological and pop in equal measure."
[w] www.hellologan.com

Right: Design group Logan created the organic identity and trailer for this year's onedotzero9 festival.



Wilfrid Brimo

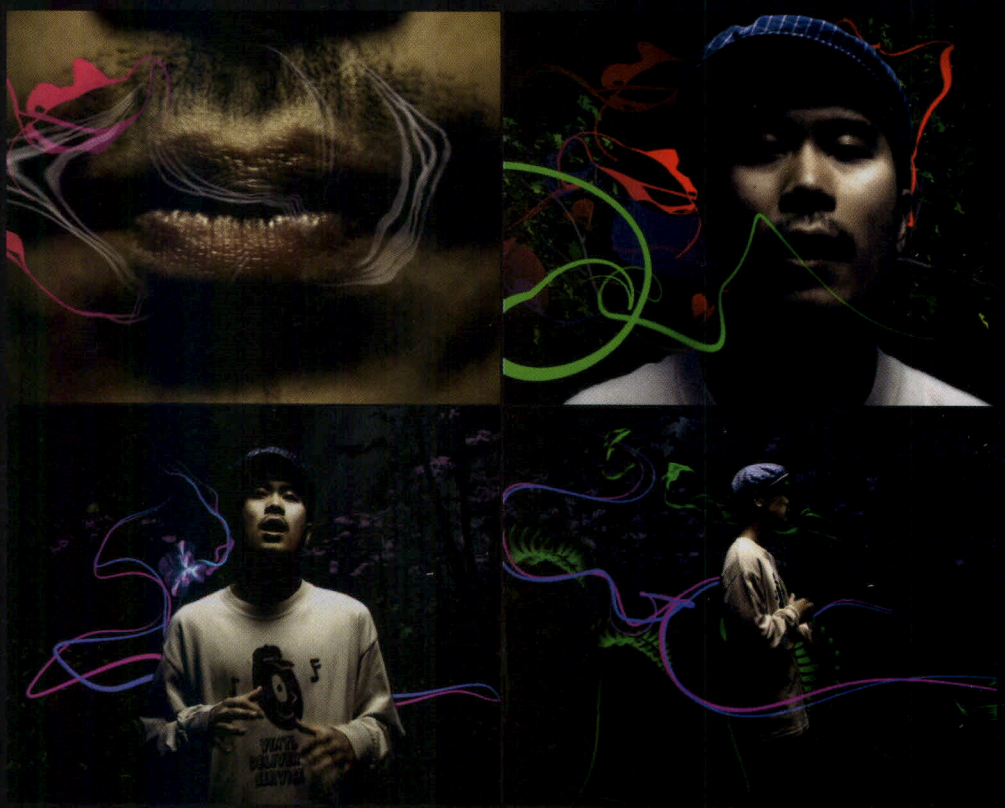
Innovative French director, photographer and graphic artist Brimo graduated from Penninghen in 2000 and soon established himself as a major player in the 3D effects and motion graphics fields. As Creative Director at WANDA studio he has produced award-winning idents and promos for Canal+, France2 (TV) and MTV, before moving on to direct commercials for The World Athletics Championships, Nescafe and Volkswagen. Wilfrid's surreal takes on everyday life are underpinned by bold graphic narratives, such as his 3D pixel-art music video *Lovegame* for French group Shakedown, which distils a life of love, marriage and separation into a four-minute computer game simulation.
[w] www.academyfilms.com

Right: Loving those pixels – Wilfrid Brimo's music video by French band Shakedown embraces pixel-art technology.

+cruz

Director, art director, designer and educator +cruz focuses on the intersection between art, design and digital narrative. Born in the Philippines, he worked at Razorfish London and lectured in the US before a keen interest in Asian culture saw him move to Japan, where he is currently producing work in-house at Wieden+Kennedy Tokyo for clients such as Nike, AIWA and Mori Building. +cruz's organic visuals for human beatbox Afra's *Digital Breath* morph effortlessly into graphical expressions of the artist's unique vocals, twisting around the rhythms and reinforcing the humanity behind the rich soundscape.
[w] www.wktokyolab.com

Right: +cruz's breathtaking video for Afra.



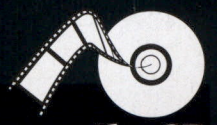
on the CD

Dominic Hailstone

Special effects maestro and creature designer Dominic Hailstone has been in the industry for six years. Still only 24, his work has brought to life the nightmare visions of artists such as Aphex Twin and Chris Cunningham with stunning prosthetics and freakish character models. Producing effects for the feature films *28 Days Later* and *Harry Potter and the Philosopher's Stone* has prompted Dominic into directing and producing his own work using models and digital techniques, such as his masterful short *The Eel*. In this motion graphics piece, a rapidly growing eel thrashes around in the confines of its undersized tank, its angry mutation reaching monstrous proportions.
[w] www.colonelblimp.com

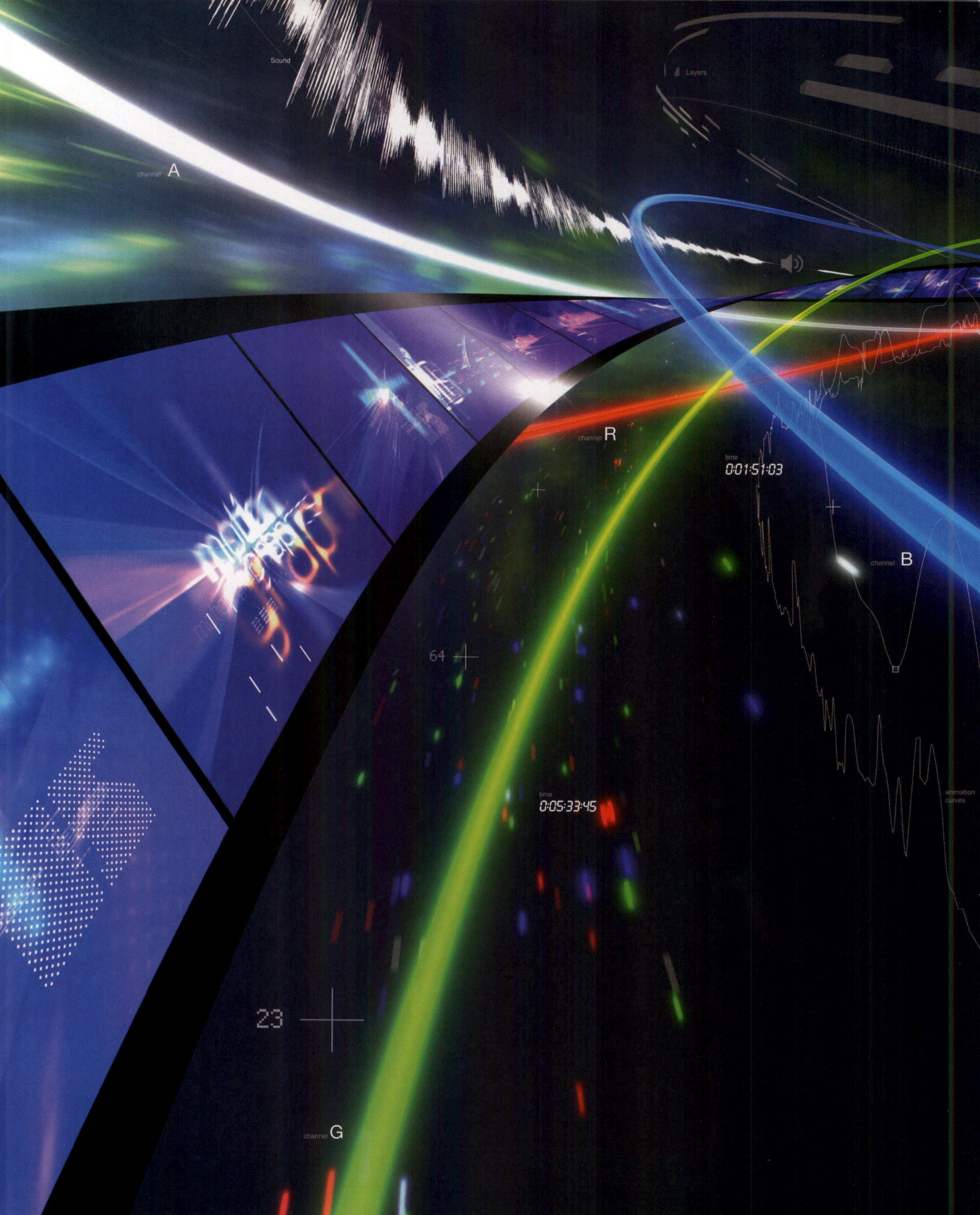
Right: Catch *The Eel* when it's screened as part of Extended Play 05 at the onedotzero9 festival from 27 May to 5 June.

Cath Le Couter and Yunus Akseki



Writer/director Cath Le Couter graduated from the NFTS in 2000. She has subsequently produced and directed several award-winning short films and is the co-founder of the independent filmmakers network Shooting People. Yunus Akseki graduated from the LCP in experimental typography before earning his stripes with the Light Surgeons and setting up Imperial Leisure with fellow graduate Rob Jones, producing visuals, promos and idents for the likes of Vogue, Diesel and Schweppes. Cath and Yunus teamed up to direct *Foot Cred* for Channel 4/Raw. Normski's tale of trainer respect on the New York subway is a kinetic fusion of narrative stills and cityscapes which puts the viewer right in the carriage as the journey reaches its surprising conclusion.
[w] www.shootingpeople.org
[w] www.imperialleisure.com

Right: Cath Le Couter and Yunus Akseki's joint project *Food Cred*.


Sound
Layers
channel A
channel R
time
0:01:51:03
channel B
64
time
0:05:33:45
animation curves
23
channel G

[illustration] GR/DD [w] www.grdd.co.uk

Design in motion

Restlessly searching for new things and unhappy with labelling – motion graphics is a bit of a teenage science. We asked a few of the field's old hands to help us really understand it...

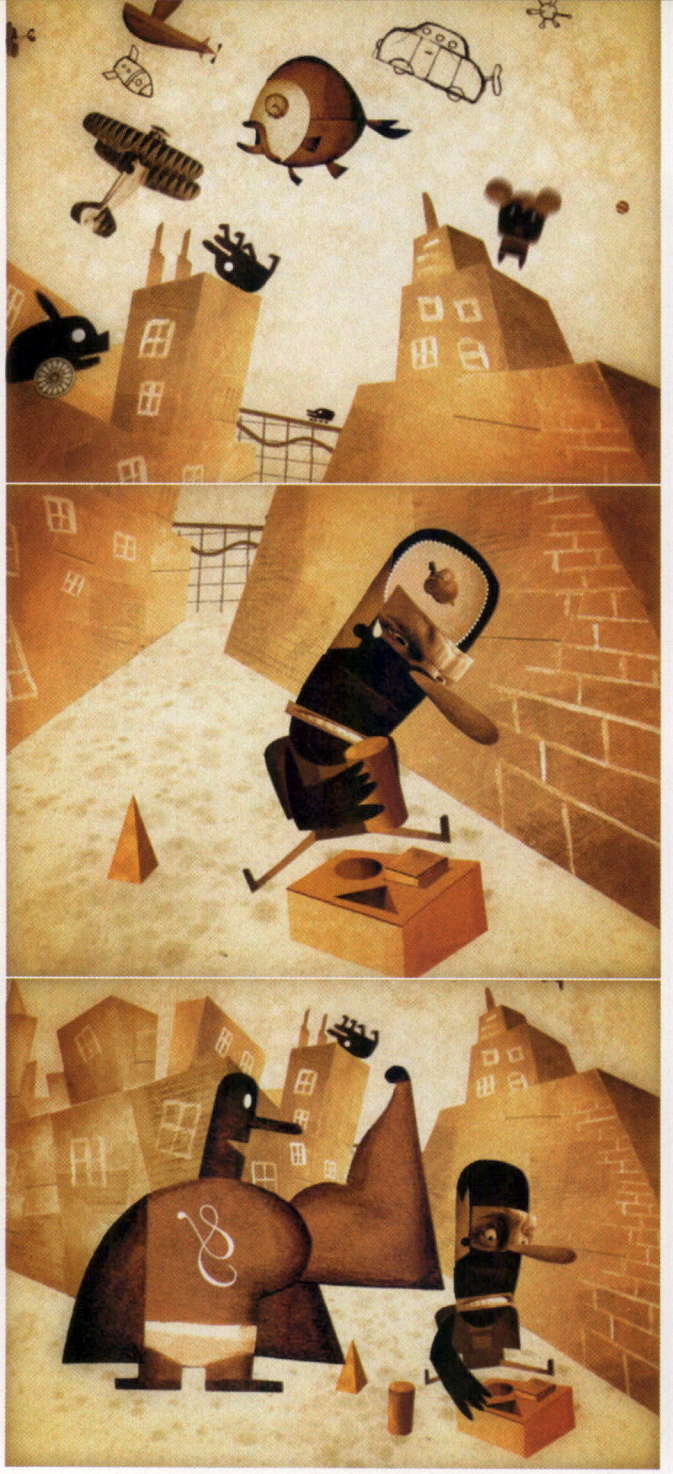
To make sure we know what we're talking about, let's start with a definition. "Graphic designers doing motion work, that's how it started," says onedotzero's Shane Walter ([w] www.onedotzero.com). But nowadays motion graphics encompasses such a diverse set of practices and skills that. "We prefer terms like design cinema or moving image."

> Danny Gonzalez, VFX Director at New York production house Perception

([w] www.perceptv.com), gives us a bit more focus: "It's the choreography of timing, movement and composition." An interesting start, and he continues: "It's the integration of all the different elements." Moving image pulls together many threads. "Designers are also compositors," says Danny.

Jo Marsh of Intro ([w] www.intro-uk.com), the studio Liam Howlett turned to for the promotion of the Prodigy's *Always Outnumbered, Never Outgunned* album, gives us a few more clues: "Masses of things go into the pot, everyone's buzzing with different visual references as well as technical processes." It's an eclectic mixture: "Techniques include live action, animation, moving graphics and numerous special effects. We're well-known for our creative post-production skills."

However, just when we seem to be getting somewhere, Jo concludes, "We're not sure motion graphics has an identity in itself. So many people are ›



Above-left: Precursor premiered *Quietus* at onedotzero8. The story depicts the life cycle of a bizarre artificial world.

Above-middle: Guilherme Marcondes' brilliant *Into Pieces* is being screened as part of the wow+flutter program at this year's onedotzero festival.

Above-right: Intro created these animated credits for *The Curse of Noel Edmonds* show.

Right: Broadcast graphic specialists Perception: Daniel Gonzalez, Jeremy Lasky and Brendan Werner.

producing such different and varied work, it's just a convenient umbrella term." Shane agrees: "It's just a label at the end of the day." Definitions are never easy.

So we seem to have established that motion graphics is a slippery term for those in the know, but there is a unifying concept: diversity. "It used to be divided into groups,"

says Danny Gonzalez, which consisted of "design, editing and visual effects."

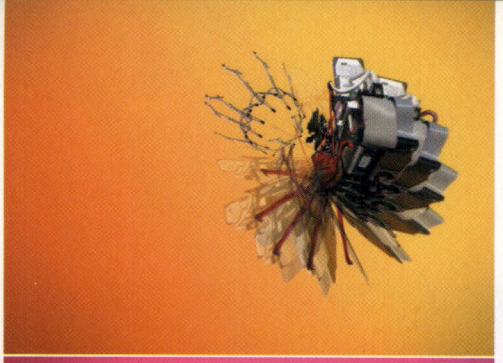
Crossing over

But those distinctions have been blurring for years, "Now the people in those groups need to know a lot more about how all the others work." This tendency is almost completely the opposite of most other branches of digital creativity where specialisation is the name of the game. Noah Harris of motion specialists Precursor confirms it though: "The aim is to merge things together as much as possible."

Strangely, blending 2D, 3D, photography, video and special effects has made design cinema more — not less — accessible. We're back with Shane again: "Tim Hope is a classic example." A stand-up comic who one day sat down to send an animated e-card and discovered a love of the moving image, "Now he's directing music videos for Coldplay." The game is wide open; it's like the wild west.

Projects can also vary widely in technical make-up: "It really depends on the type of production," says Jo Marsh. "A couple of our directors produce quite lo-fi work, using their mobile phones and digital cameras to shoot stuff, but other productions incorporate full live-action shoots." No technology can be overlooked.

The speed with which the technology became properly accessible made motion graphics a cross-over discipline, a melting-



MTV Top 20 countdown

Creative Director Noah Harris explains Precursor's work for the MTV chart countdown...

How did the MTV Top 20 job come about?
We had recently finished a small project for VH1 and were asked to pitch on the new look for the MTV European Top 20 show. It was the first time we had worked with MTV.

Are there any basic rules for TV work?
There are a lot of technical rules, and a basic knowledge of all this is necessary if you don't want your tapes returned!

Where did you get the inspiration for the Top 20 piece?
A chart show is about revealing which track is in which position. We took this word – reveal – as a basis and built 20 bespoke objects which opened out like a flower or a peacock's tail feathers.

What were the technical challenges?
We wanted to push *After Effects*' 3D capabilities further than we had before. The process was one of mathematics and experimentation.

Did you learn anything new?
Technically, I guess we realised there were things we could do with *After Effects* that we hadn't done or really seen done before. More importantly, it started our relationship with MTV. They're a great client to have, as they're constantly looking for fresh new work.
[w] www.precursorstudio.com

Right: Produced by manipulating huge volumes of still photography in *After Effects*, Precursor's MTV Euro Top 20 is a great example of motion graphics transcending the desktop.

pot of technique and influence. Technically challenging production methods are not an essential part of the best work: "A lot of the work you find at festivals isn't technically amazing," says Noah Harris, but that doesn't seem to matter because, he says, "Really, it's about the ideas."

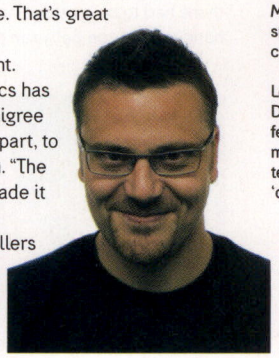
Technologically driven

But if ideas are the wheels on design cinema's MPV then technology is its engine. And according to Jeremy Lasky, Design Director at Perception, that engine has been radically overhauled. What once was the major obstacle to innovation is now a driving force, and a source of inspiration. And let's not forget the newbie for whom it's a challenge of exploration. "Technology has dramatically changed this field."

To up the contrast, let's get some industry history from Jeremy. "When I started at R/Greenberg Associates, all the designers did were storyboards and style frames," he says. This made experimentation an expensive business: "We'd sit with an editor in a real-time room or a *Flame* suite and art direct our storyboards." This set-up was never going to make the transition to anyone's bedroom studio.

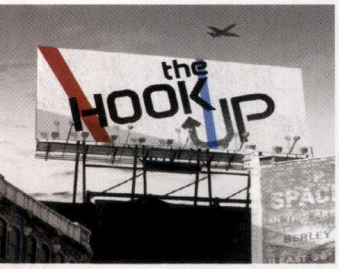
Compare that with the current situation: "Perception is all run on desktop Macs: *After Effects, Combustion, Shake* and *Final Cut Pro HD,*" says Jeremy. Shane Walker makes a more concise summary of the situation when he adds that, "The collective Shynola bought its PCs at Tesco." The platform for award-winning motion graphics has gone from editing suites costing thousands of pounds to PCs you get reward points on in less than a decade. That's great news for the next generation of talent.

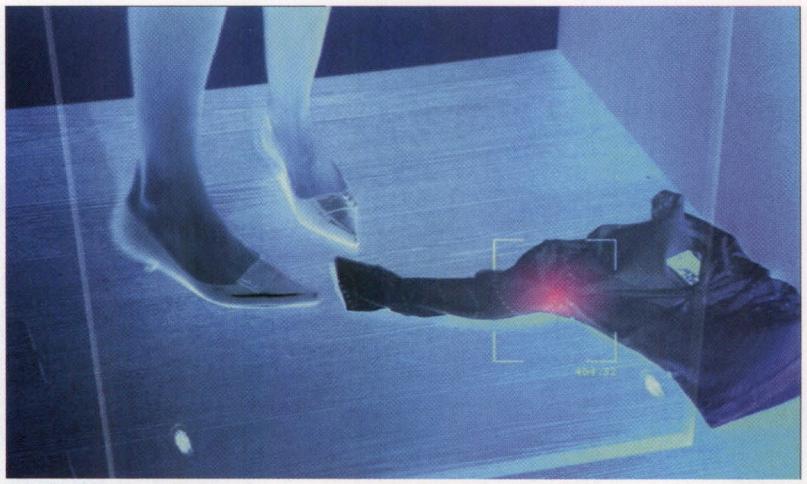
Motion graphics has an interesting pedigree thanks, at least in part, to its rapid evolution. "The technology had made it possible for non-traditional storytellers to have a go," says Shane Walter. But crucially, these

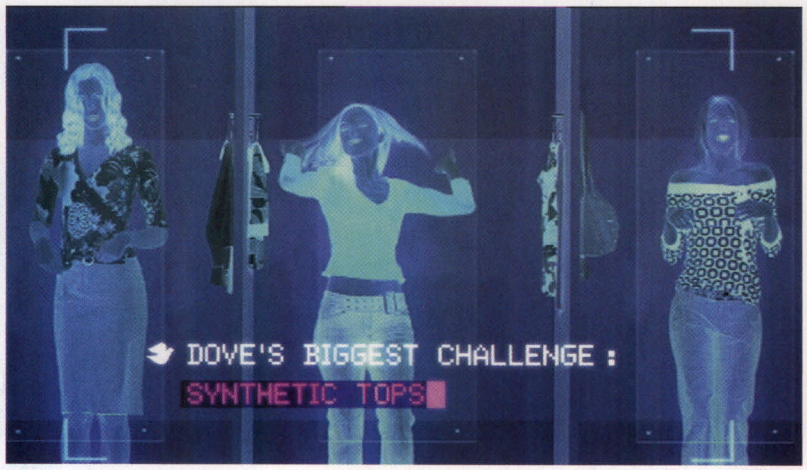


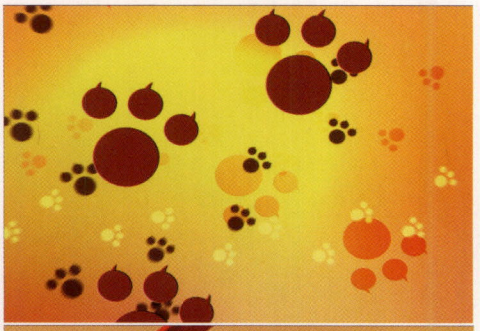
Above-left: Stills from Precursor's MTV countdown. Noah Harris is encouraged by the fact that big clients such as MTV and Nike are going to smaller places to get the creativity they need.

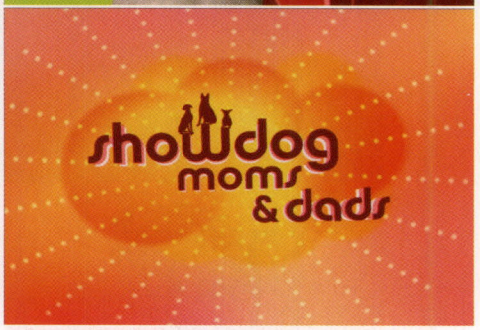
Left. Shane Walter, Director of the onedotzero festival, would prefer motion graphics to be termed 'moving image' or 'design cinema.'











Above, opposite page and bottom-right: *The Hook Up*. New York based Perception provided everything from design and effects to film production and logo design for this celebrity-meets-athlete show on US network ESPN.

Above-middle: Intro Studios accepted the challenge from Dove Deodorant and made it look cool.

Above-right: Another Perception assignment, this time for the Bravo series *Showdog Moms & Dads*.

pioneers "weren't just making the same stuff cheaper; they were finding new ways of telling stories." A central plank of motion graphics is experimentation.

Noah Harris adds weight to this argument: "When we started out, technically, we weren't really sure what we were doing." Working for interactive TV pioneers Static, he and other luminaries, such as Richard Fenwick, had to learn on the job. Fortunately they had an ally — Adobe Software. "After Effects is the industry standard," says Noah.

If cross-over was going to work then there had to be a bridge and Adobe was on hand to pontoon between the various departments. "For the designer accustomed to Adobe applications it's intuitive," explains Noah. "Once I'd picked up a version of *After Effects*, the possibilities just blew right open," agrees Perception's Jeremy Lasky. This package is the pot in which influences are melted.

So, a new generation of filmmakers is now coming on stream, having grown up with the technology and inherited a tradition of experimentation. This is a time of great potential. "You get a lot of 'young guns'," says Danny Gonzalez. "It's great finding these young artists because not only do they carry a personal style they also keep you enthusiastic about the business."

With a purpose

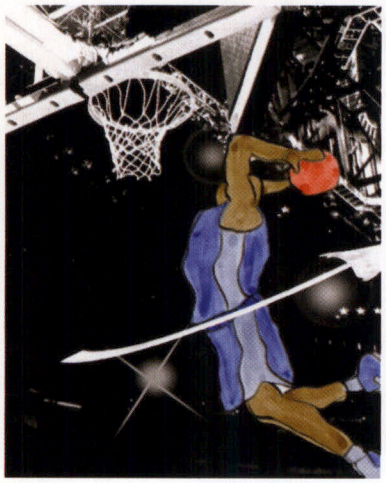
To be classed as a young gun you have to do more than just jockey the software. Thanks to that experimental tradition, motion graphics is an incredibly fecund science, and, for the same reason, also a challengingly original sphere to work in. This is one field of the design industry that continues to break new ground.

For the designer, only one obstacle remains: context. "If you're doing experimental work then you'll naturally find yourself thinking about moving images," explains Noah. And if you're not, you won't. The only way out if you're not shepherded in that direction by your nine to five is to produce self-initiated work. "That's a great promotional tool," agrees Noah. "It's how we got some of our first jobs."

Festival goers

Festivals such as onedotzero and Rez have always been invaluable to design cinema. Initially they provided a forum for artists unsure of exactly what their work was for: "When onedotzero came along," explains Shane, "suddenly there was somewhere they could go and meet others doing the same thing." At this stage there was a lack of direction but a desire to experiment. Shane speculates that, "It was a bit like the AA in the early days." And he's not talking about roadside rescue.

The festivals continue to broker talent by showing work which has few other outlets



but still has value of its own. "It was the case in the early days that some people were just making pretty pictures," agrees Shane. That's still true in some cases but not necessarily damning. "Abstract painting has a very long tradition," and moving image can take part in that. "It's not essential that motion graphics be driven towards having to mean something. Why should it be?" This thought is liberating.

Trends and their setting

"There are definitely still possibilities for originality and experimentation," believes Jo Marsh, "although it really depends on each brief and how far you can push the client!" The best news comes from Noah: "The likes of MTV and Nike aren't going to the big powerhouses any more but to the smaller places." The reason is simple: "They have the creativity."

Moving image can be a terribly complicated business, make no mistake, but perhaps because of our in-built feeling for cinema, complexity doesn't always equate with quality once it's on the screen. The fact that people prefer 'realness' is even changing what's expected of 3D. "We're seeing more work that doesn't have an obvious CG feel," says Danny Gonzalez. "Work that looks organic or handmade but was actually generated with 3D animation software."

"3D in a 2D world is a trend we've been seeing for a while now," adds Danny. This is something that later versions of *After Effects* specifically cater for by taking in 3D camera data without introducing unexplained modifications. Add to this the arrival of HD video and the possibilities multiply endlessly. The excitement around this field is hard to exaggerate. If that excitement continues to translate into a hunger for experimentation, design cinema may yet live up to the name. ca-p

What Barry Says

We go behind the scenes on Simon Robson's award-winning short that puts the moves on US foreign policy...

Do you have a background in motion graphics?
Well, I came to London in 1995 to do a degree in French and politics. I was into music at the time and decided to try and make a go of that, but by 1999 I decided to move into graphics and got a job at Fitch London.

How did you get into the field then?
I taught myself *After Effects*, *Cinema 4D* and lately have been getting into *Maya*. I freelance at a few places but more often than not I've been an operator rather than on the creative side of things.

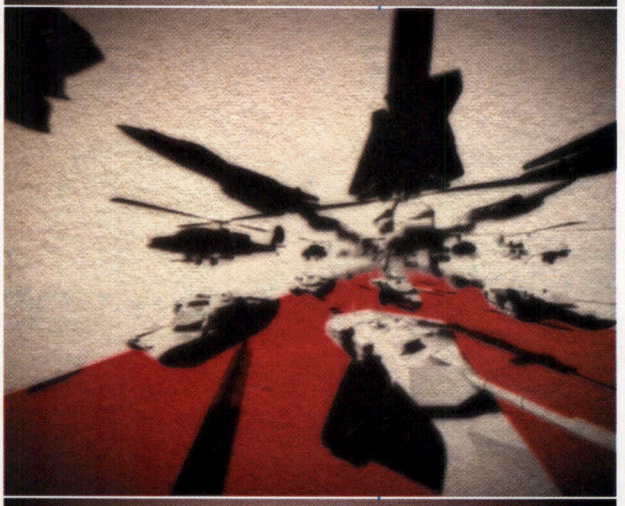
What made you want to make your own film?
I've built up frustration with the work I do always being for the purpose of selling something. A lot of people went to college to do conceptual work so they're happy to do commercial work when they come out. I've never had that so I'm looking for it now.

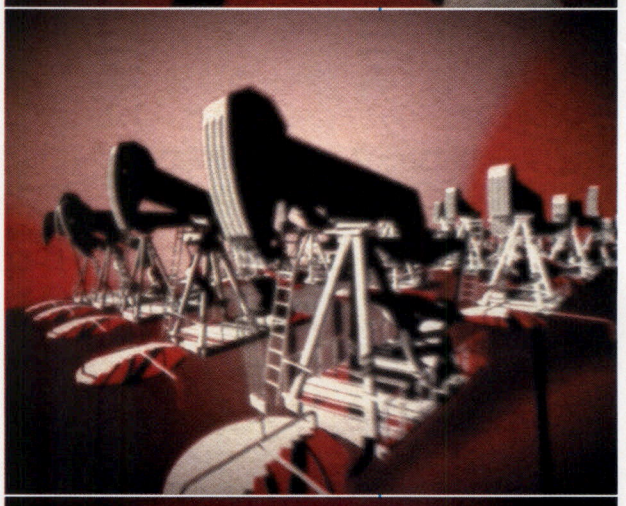
What is the film about?
My friend Barry lives across the garden from me and we always talk about US foreign policy down the pub. The apathy surrounding this subject seemed a huge problem, so I wanted this film to make a difference.

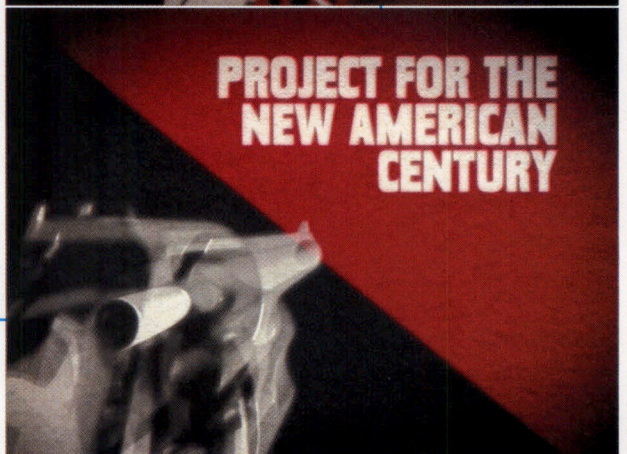
What has the response been like?
My site was hit a quarter of a million times in October last year and I got something like 1,500 emails, from the States mostly, and 95 per cent of those have been positive. I've also had a lot of work from it.
[w] www.knife-party.net

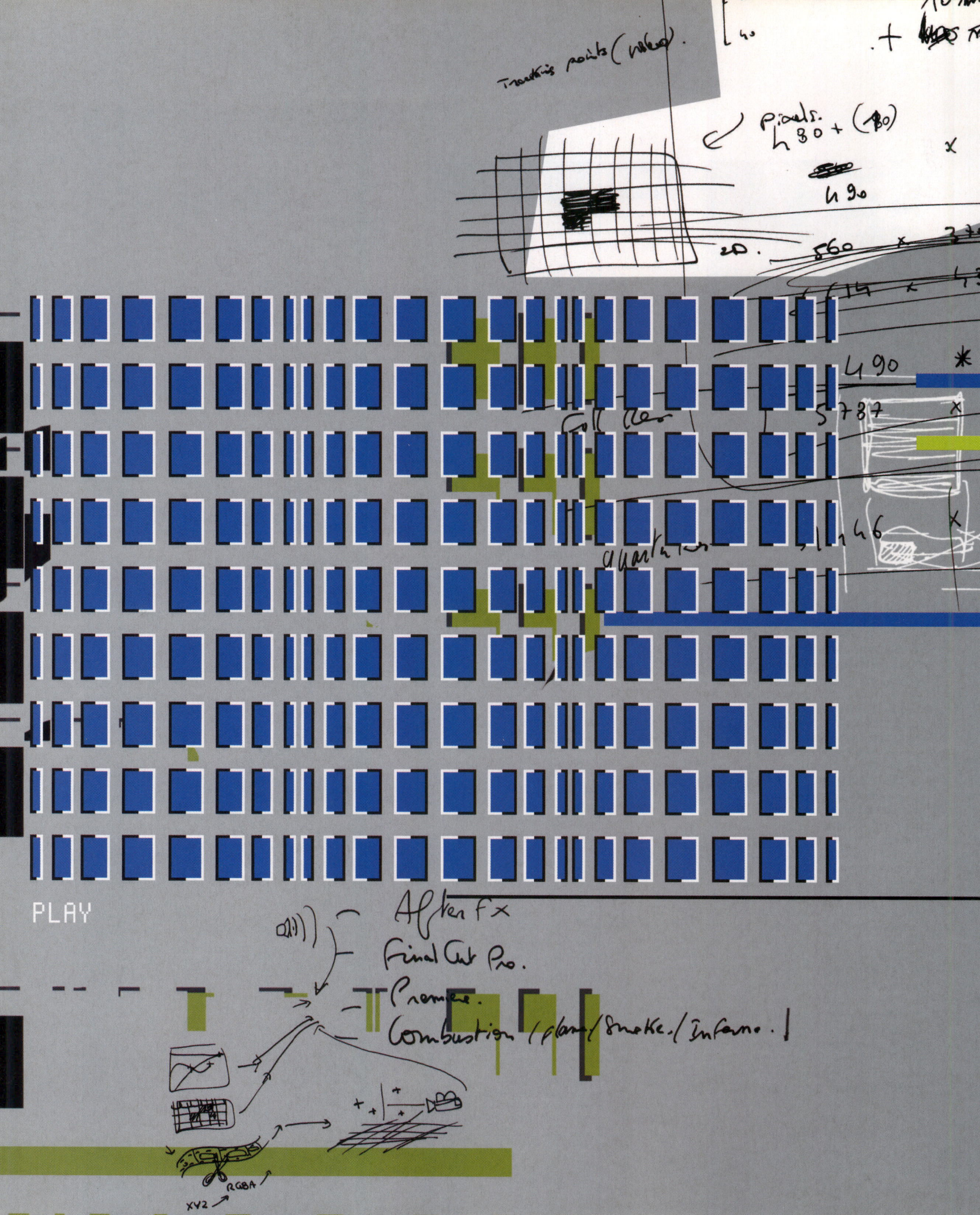
Above: Simon Robson is the man behind the short film *What Barry Says*.

Right: Produced largely using *Cinema 4D* and *After Effects*, a major technical breakthrough came with the discovery that camera positions could be transferred between the two packages.








Tracking points (video).
pixels.
490
5787
146
PLAY
After FX
Final Cut Pro.
Premiere.
Combustion / Flame / Smoke. / Inferno. /
RGBA
XYZ

Feature

[illustration] GR/DD [w] www.grdd.co.uk

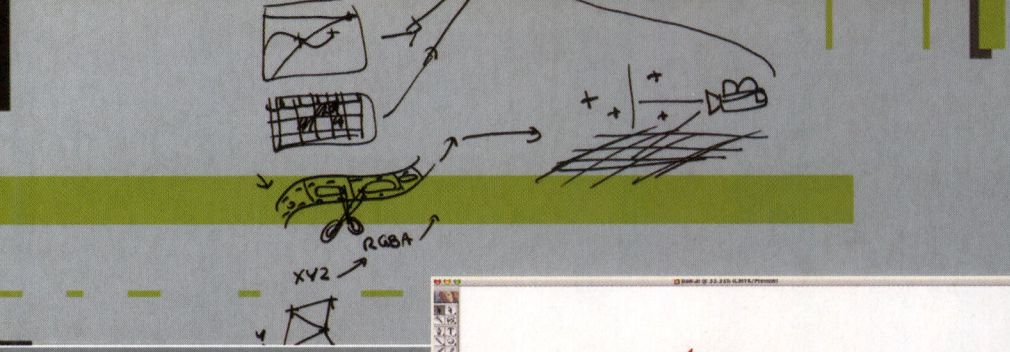
30 motion graphics tips

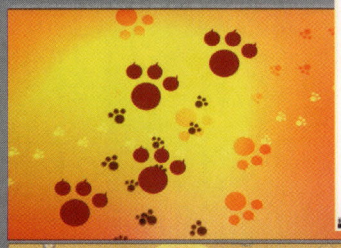
Motion experts at Perception shed some light on how the company made a show opener and motion graphics for Bravo's *Showdog Moms & Dads*...

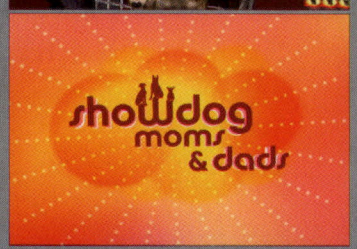
Over the following pages, Perception founding partners Lasky, Gonzalez and Werner describe their step-by-step process to successfully completing an entire show graphics package for Bravo channel's quirky offering *Showdog Moms & Dads*. The package included a spectacular show opener, together with transitions, lower thirds, factoids, chapter headings and title pages.

From the beginning, Bravo wanted a fun, tongue-in-cheek feeling to pervade the opener. The series is like a real-life version of the hilarious Christopher Guest film *Best in Show* (2000). In a nutshell, *Showdog Moms & Dads* is eight episodes following several couples whose lives revolve around their show dogs. Although Bravo asked that Perception's graphic package roughly resemble that of *Showbiz Moms & Dads* (another Bravo series), it wanted the package to reflect a fresher, newer, more light-hearted aesthetic.

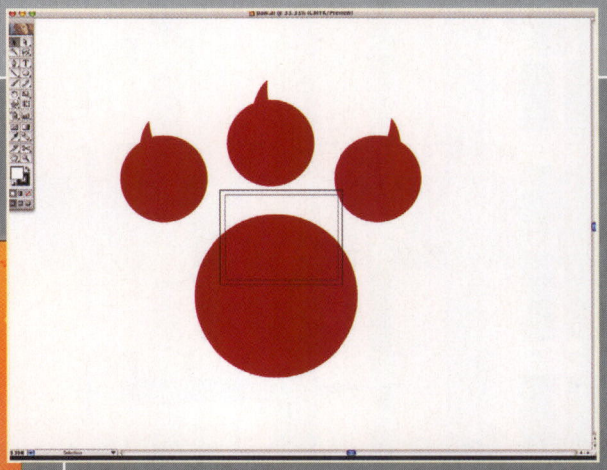
Perception replied to Bravo's request by providing a blend of vibrantly coloured graphics and live action, placing the undeniably idiosyncratic pet-lovers in appropriately quirky environments. As you'll see, the project required extensive rotoscope work to achieve the desired effect. >







The brief from Bravo was to make it like *Showbiz Moms & Dads* with added freshness.



Preparing graphic elements as vector files ensures that they don't break up in motion.

1 Think ahead

Always begin a project with the end in mind. Visualise exactly how you want your motion graphics to look when they're completed.

2 Listen to your client

For *Showdog*, Bravo wanted a simple approach based on the graphic style of *Showbiz Moms & Dads*, but with a fresher, more fun approach. This reference was vital.

3 Plan your time

Give yourself enough time. Even with tight deadlines, set milestones for yourself and create small goals to get to the ultimate one.

4 Storyboard ideas

Keep the client in mind when creating storyboards, but make sure you sketch out whatever comes into your head. Then pick the ones you like the most.

5 Let the client choose

Give your clients as much choice as possible. For *Showdog*, several days were spent creating eight different boards. Bravo picked two of those, and then narrowed it down to the one that was finally used.

6 Motion tests

Whenever you can, do a motion test of one or more of your boards. On *Showdog*, Bravo ultimately picked the board that included a motion test.

7 Find strong footage

Work to find the very best footage possible, preferably full frame. This means a lot of scrolling through tapes looking for the right elements, but it will save time in the long run. Sometimes an element will look fantastic at first, but when you look closer you'll see that an important portion of the element is outside the frame. Take the time to find the best and most complete footage.

8 High definition

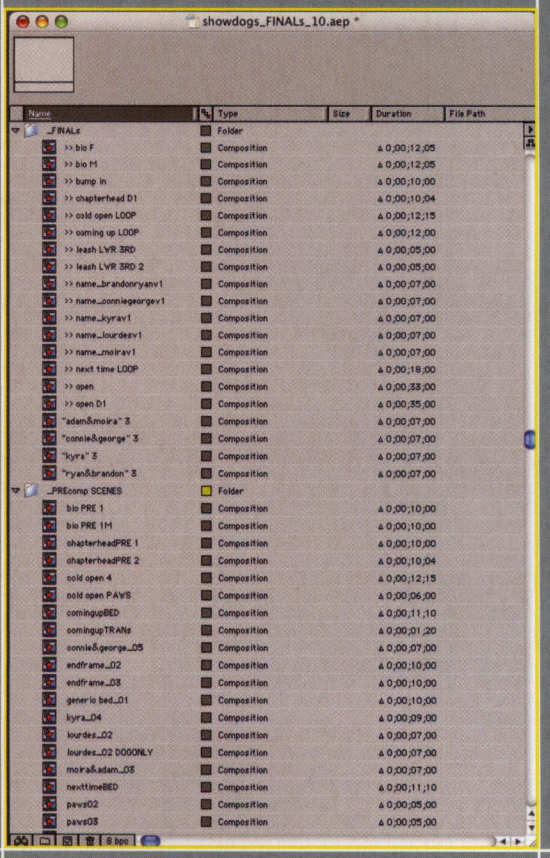
Whenever you can, get the highest quality footage possible. The higher definition means more detail, and more detail means better integrated graphics.

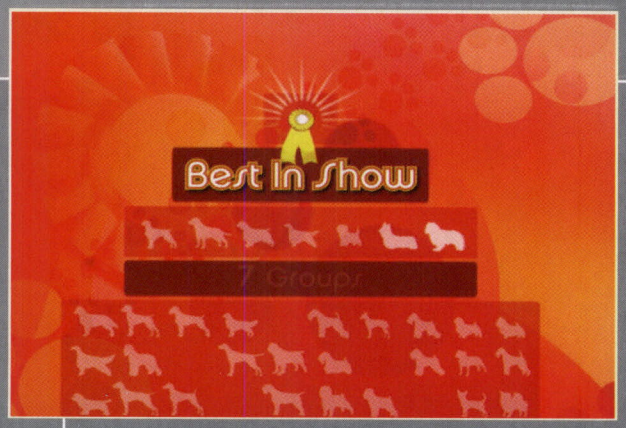
9 Replacing portions

If you have to replace a missing portion of the frame by tracking in a replacement, use a larger element. Shrinking down an element adds detail.

10 After Effects pre-comps

Use pre-comps in *After Effects*, as shown below. This will help you stay organised and keep you from being overwhelmed by tons of unnecessary layers.





The opener of *Showdog Moms & Dad* offers the same tongue-in-cheek quirkiness as the 2000 film *Best in Show* by Christopher Guest.

11 Prepare graphics in Illustrator

Use Adobe *Illustrator* to prepare your graphic elements as vector-based files. When you put your graphics into motion, this step keeps them from breaking up or developing a 'soft' appearance.

12 Using text elements

If your motion graphics include text elements, you can build them in *After Effects*' text module. This step makes text elements much easier to modify.

13 Get organised

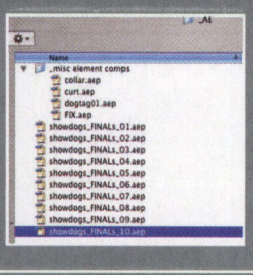
Always keep your composites well labelled and organised. When you hit a time crunch, the last thing you want to do is waste time looking for the right files or mislabelled pre-comps.

14 Synchronise watches

Use *After Effects*' General Preferences to synchronise the time between all your related motion graphics items.

15 Old-fashioned methods

At the beginning, go old school. Sketch things out with pencil and paper, fully storyboarding all motion. It's a lot easier to map out a complete sequence on paper than it is on the computer.



Save often and in increments. That way you can always go back to an older file and not have to rebuild extensive work.

16 Aim high

Always strive for beauty. Design every frame as if it could be hung in an art gallery. And be fearless: experiment and try new things. You can always pull back if you mess up.

17 Show rough cuts

Keep reminding your client that the rough work will look better in the end. Don't be afraid to show them your rough cuts. It's a process.

18 Program tips

When you're unsure about using an effect, leave your mouse hovering over the tab of the effect you want to use. Most graphics programs will provide you with tips. Some of them might help.

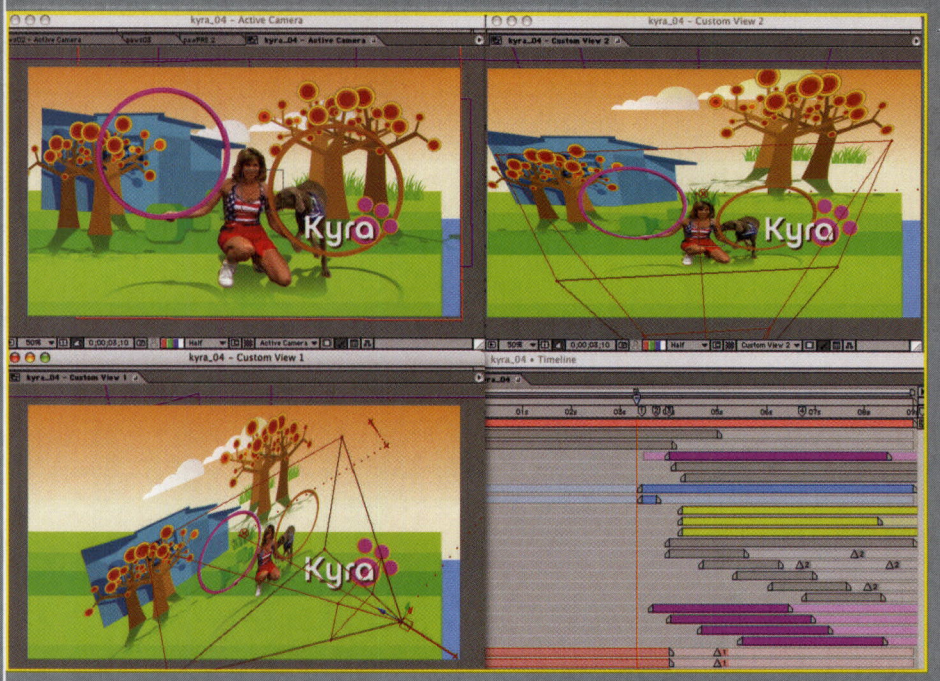
19 Experiment

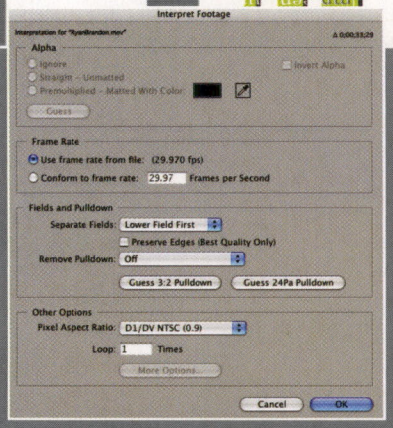
Play with all aspects of your program. It really is the best way to learn, and you can always undo something that looks bad.

Live action is mixed with vibrant graphics.

20 Multiple views

If you're using the camera tools in *After Effects*, keep two or three views open at all times (as shown below). This will help orient you within the scene and remind you where in 'space' you are.





In *After Effects*, remove fields in 24fps footage to enable you to find important edges.

21 Alternate between apps

Use multiple complementary programs together. In our experience, keeping *After Effects*, *Photoshop* and *Illustrator* open simultaneously saves lots of time. You can easily jump back and forth between the three to create and tweak elements in the motion.

22 Use shortcuts

In *After Effects*, holding down the Option key and E will get you to *Photoshop* or *Illustrator* automatically with the file you clicked on, instead of leaving *After Effects* and going into the other programs. Learning shortcut keys will save you a lot of time and significantly improve your workflow.

23 Customise your programs

Take the time to customise *After Effects* for your own special needs. Create templates for frequently used output modules, render settings, filter presets, and so on.

24 Remove fields

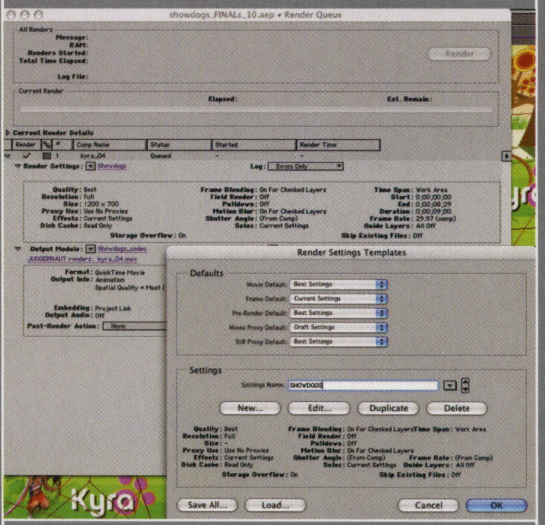
When rotoscoping 24fps footage, make sure you remove fields. This will help you find important edges.

25 Rough rotoscoping

When rotoscoping, it's best to do a lot of rough rotos to give yourself and your client a good idea of the graphic look, but without killing yourself to do it.

26 Test rotoscoping

When rotoscoping motion graphics, start with a test roto every ten frames or so. If that doesn't work, try every fifth frame. Often, the program may help you avoid having to rotoscope every frame by automatically interpolating the motion for you.



Creating Render Settings Templates is one of many ways in which you can customise *After Effects* for your particular needs.

27 Take notes

Always keep very precise notes concerning timecodes and clip locations. Don't waste time searching for what you need.

28 Expansion features

When rotoscoping in *After Effects*, use the Expansion feature in the mask. When you do a rough roto, and you're a little off, you can easily expand or contract your mask to fit.

29 Take your time

Never rush the job, even when you're in a crunch. Be patient. It also helps to have a good team and know everyone's strengths.

30 Finishing touches

Once the client likes what they see, you'll still have work to do. Explain the need to rotoscope the final footage, smooth out moves and generally polish the project. They may think that it's done and want it right away, but there's still work to be done. ca>p

WIN: onedotzero goodies

MOTION GRAPHICS PRIZES!

Win a stack of onedotzero prizes and gain some free motion graphics inspiration!

This month, we've teamed up with international motion graphics festival onedotzero to bring you the chance to get your hands on some cool inspiration, in the form of books, DVDs and festival tickets.

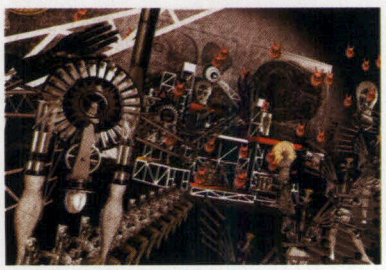
We have five copies of onedotzero's superb *select dvd 3*, a copy of its acclaimed book, *Motion Blur*, plus two tickets to *wow+flutter*, screening at the ICA between 27 May and 5 June.

Competition 1

To be in with a chance of winning a copy of the DVD, or the book, answer the simple question below and enter at **[w] www.computerarts.co.uk/competitions**. You can also enter by sending your answer on a postcard with your name and address to: **'onedotzero book and DVD competition', *Computer Arts Projects*, Future Publishing, 30 Monmouth Street, Bath, BA1 2BW.**

Question 1

Which filmmaker made the short film *Watermelon Love* (see page 6 for a clue)?



Competition 2

To enter the draw to scoop two tickets to the motion graphics event of the year, *wow+flutter*, send the answer to the following question to **rob.carney@futurenet.co.uk** with the subject header **'wow+flutter'** by 6pm on 1 June. The winner will be notified by Thurs 2 June and must be able to attend the screening at 7pm on Sunday 5 June at the ICA, The Mall, London, SW1Y 5AH. Transport to and from the venue is not included in the prize. For more information on the event see **[w]** www.onedotzero.com/programme.php?id=70&event=30952.

Question 2

Where is the screening of *wow+flutter* to be held?

The rules

The closing date for Competition 1 is 6 July 2005. Entries for Competition 2 are needed by 1 June 2005. Employees of onedotzero and Future Publishing, their agents and families are not permitted to enter. Multiple entries are not accepted.

The Editor's decision is final and there are no cash alternatives. No other correspondence will be entered into. If you are entering by post and do not wish any of the companies involved in this competition to contact you with further offers, please indicate this on your entry. We will not pass your details on to third parties. ca-p

Top: Don't miss this chance to win one of five copies of onedotzero's *select dvd 3*.

Above and left: Some of the motion graphics works being shown at *wow+flutter* on Sunday 5 June. Two tickets to the screening could be yours!

Create a sharp title sequence
AMETERS
5 FPS
É FILE
PLETE
FOOTAGE
IGINA
ACK L
OF TITLE TIO
BL DIMEJAY ONAL XTION
2 X
NSI
ANIMAT
/Y

Tutorial [illustration] Rob Chiu [w] www.theronin.co.uk

Create a sharp title sequence

In the first of two tutorials on animating titles, we show you how to make a dramatic first impression...

The following tutorial shows you how you can import a native *Illustrator* file into *After Effects* and turn it into a ten-second animated title sequence. Don't worry if you don't have *Illustrator*, though, because the source file (which can be found on this month's CD) can also be opened within *Photoshop* and used to the same effect.

This piece is the basis for a more advanced sequence – a short film entitled *Black Day to Freedom* – some of which will be covered in the tutorial beginning on page 30. This logo has been created for a project about refugees, asylum seekers and the displacement of people. The graphics incorporated in the montage reflect the plight of some of the individuals that are classed as refugees, hence the use of barbed wire, blood, razor wire, hair caught in the wires and so on. For more information on this project go to [w] www.blackdaytofreedom.org.

You can, of course, create your own logo and use the techniques provided here to animate it in a similar style. The tutorial focuses mainly on the use of *After Effects* for a fairly simple animation using the software's 2D environment. Add your own sound files to give the motion more life and create an atmosphere by using your own backgrounds for the animation to sit on. The advice on the next few pages should teach you new techniques that will guide you to experiment with different types of animation in the future. >

Expertise provided by Rob Chiu of The Ronin. Find out more about Rob and his current projects at [w] www.theronin.co.uk, [w] www.blackdaytofreedom.org.

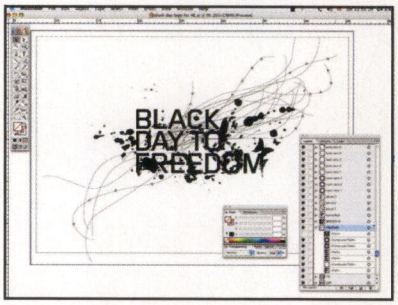
All the components needed to complete this tutorial can be found on the *Computer Arts Projects* CD72 in the Software\Tutorials\Tutorial files\Tutorial files\All\Title sequence folder. You'll also find the final ten-second AEP file in the same folder.

Part 1: Preparing your files

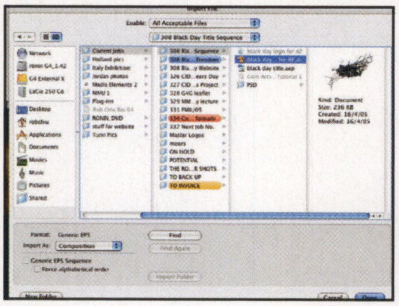
Bring files into *After Effects* and prepare layers for animation...

Inverting text

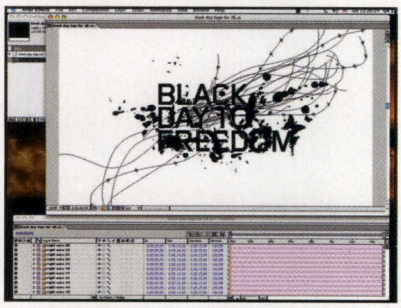
If you'd prefer your logo animation to be white out of black, create an adjustment layer and place it above all other layers and apply an Invert filter to it. Make sure you create a solid white layer as the bottom layer and you'll have a totally different-looking logo.



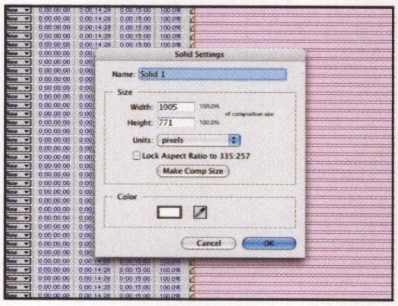
1 For this project we initially created the vector graphics in *Illustrator*. *After Effects* enables you to import native *Illustrator* files thus bypassing *Photoshop* completely (which is usually the weapon of choice for *After Effects* source material). If you don't have *Illustrator*, a *Photoshop* file can be imported from CD72.



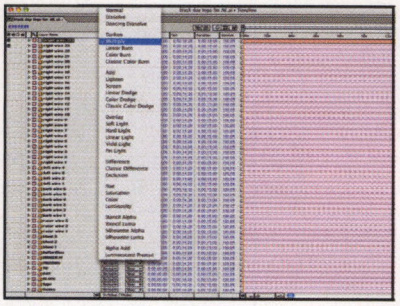
2 Launch *After Effects* and select File>New>New Project. Then select File>Import>File. Locate the file 'Black Day Logo for AE.ai' on the CD and make sure you're importing it as a Composition as opposed to importing it as Footage. Then hit Open.



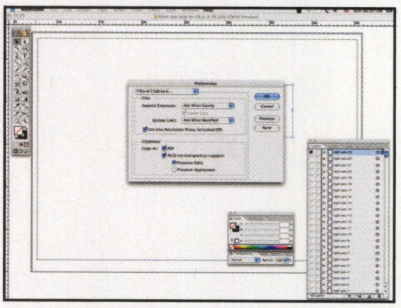
3 Double-click on the Composition icon in the 'untitled project.aep' window, opening the Composition window and timeline. The Composition window will have a black background, so select Composition>Background Colour and make this colour white.



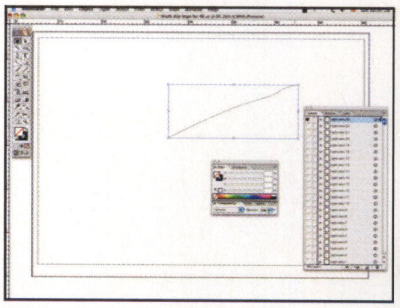
4 Next we're going to replace each of the layers entitled 'right hair' and 'left hair' with a solid layer created in *After Effects*. Select Layer>New>Solid. Ensure that you click the 'Make Comp Size' button and make the colour white. Call this layer 'right wire 23' and place it above the 'right wire 23' already imported from your *Illustrator* file.



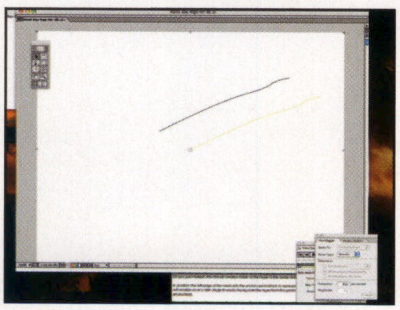
5 Change the mode of this new layer to Multiply so that you can see the graphics imported from *Illustrator* beneath it. Next turn off all the layers as you would in *Photoshop* except for the original 'right hair 23' and the new 'right hair 23' layer that you just created.



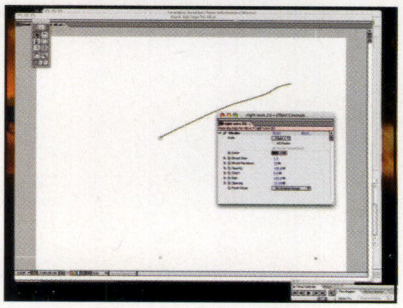
6 Go back into *Illustrator* and go to Preferences>Files & Clipboard and ensure that the 'AICB (no transparency support)' box is ticked and the Preserve Paths option is selected. Hit OK and open the original *Illustrator* file again.



7 Select the 'right hair 23' layer. Copy this layer and then go back into *After Effects* and paste it into the new 'right hair 23' layer you just created. This should create a mask on the layer in the same shape as the original 'right hair 23' layer.



8 Position the left edge of the mask with the anchor point, which is represented by a circle with an x through it. This will enable you at a later stage to easily manipulate the layer from this point via 2D rotation or in *After Effects*' 3D environment. Next move the entire layer so that it sits exactly on top of the original 'right wire 23'.



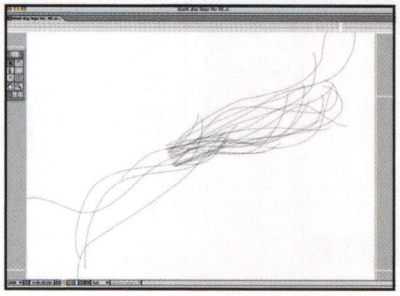
9 Go to Effect>Render>Stroke and enter the following settings: Colour: black, Brush Size: 1.0, Brush Hardness: 100 per cent, and then leave the rest as the default settings. Notice that your mask is now filled with black and resembles the original layer imported from *Illustrator*. Repeat steps 7 to 9 for all right and left hairs ensuring that on the left hairs you make the right edge of the path line up with the anchor point.

Part 2: Animating hair

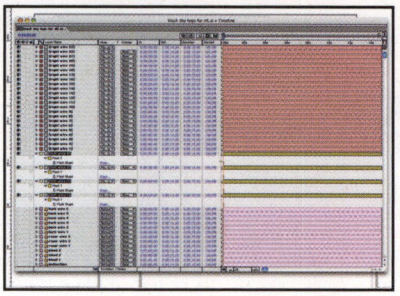
Having created the hairs in *After Effects*, you now need to animate them...

Pasting keyframes

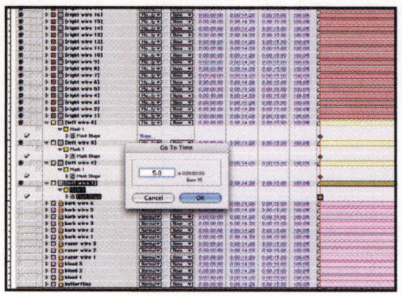
You can copy and paste effects from one layer to the next to save time. This can make things flow a lot quicker especially if you have multiple layers that all need scaling from big to small. Ensure that when you paste keyframes into the timeline you position them where you want the effect of the transition to begin.



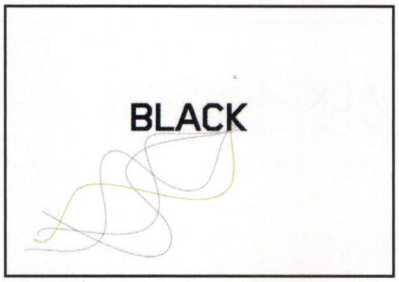
1 You'll now see the reason why we replaced the original *Illustrator* files with the *After Effects* generated layers. Because the layers are now actual masks created from an original vector path, we can modify these masks over time, whereas we couldn't have modified an imported graphic in the same way.



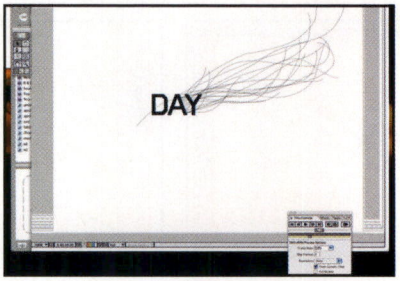
2 Open the mask attributes of the 'left wire' layers by selecting all four layers and pressing M on the keyboard.



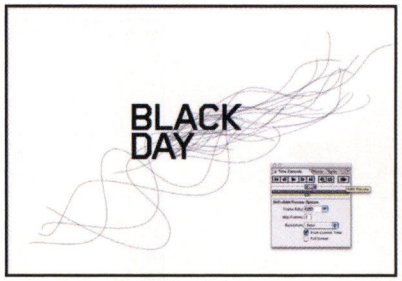
3 Create a keyframe for each layer at the start of the timeline (0.00.00) by clicking on the stop-watch icon next to Mask Shape. Go to time (10.0) in the timeline. (Cmnd/Ctrl+G brings up the 'Go To Time' window). Turn off all the 'right wire' layers and activate the type layer for the word BLACK.



4 Now you need to alter the mask for each of the four layers. Do this in a similar way as you would alter a path in *Photoshop*. Grab the points to alter the mask, using the Bézier controls to retain the smoothness of the curves. Be sure to keep the far-right point underneath the K of BLACK.



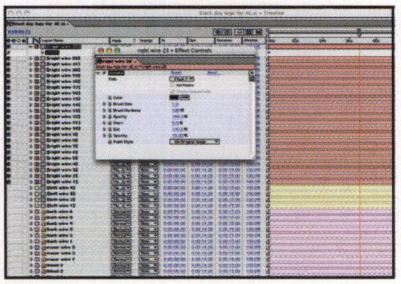
5 Do the same for all the right hairs (turn off the left hairs and the word BLACK). Activate the type layer for the word DAY and make sure you keep the far-left point underneath the letter A. Be as creative as you like, but remember to set your initial keyframe at time 0.00 before changing the masks.



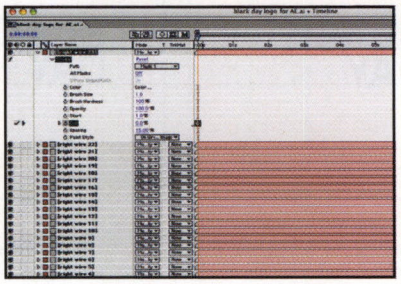
6 Turn all the left hairs back on. Also turn on the type BLACK and RAM Preview to see your progress so far. The hairs should animate now as if they were swimming in water.

Part 3: Creating effects

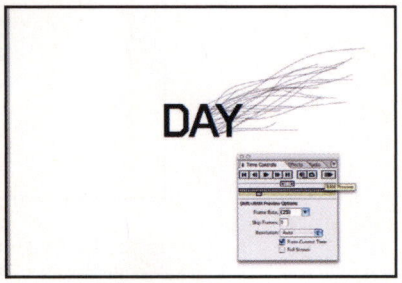
Use the Stroke effect to make it look like the hairs are growing out of the letters...



1 The next step is to use the Stroke effect to create the appearance that the right hairs are growing out of the letter A of the word DAY. Turn off all the left hairs and the word BLACK. Next select 'right hair 23' and press E. This brings up the effects applied to this layer. Double-click on Stroke and the Effect Controls window will appear.



2 Go to time 09.28 and set a keyframe for the End by clicking on the stop watch and setting the percentage to 100. Then go back to time 0.0 and set a keyframe for the End with a value of 0 per cent. Notice how there is no line any more.



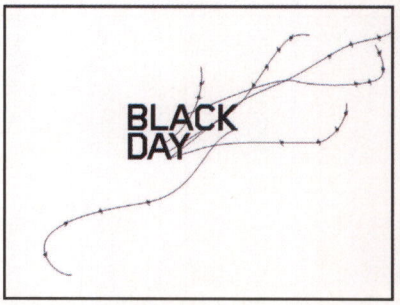
3 Use RAM Preview to see the effect you've created and then do the same for the rest of the right hairs. You can vary the times at which the hairs stop 'growing' to give the piece a bit more spontaneity. Repeat these steps for the left hairs.

Part 4: Barbed wire

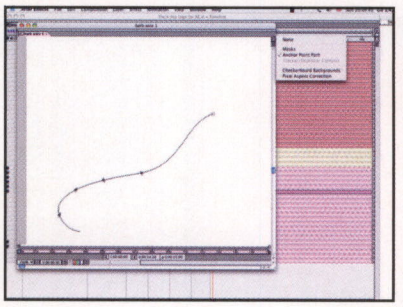
Add barbed wire to your animation to give it a more edgy look…

Shortcuts

Pressing U in the timeline brings up every keyframe created for that layer. This makes syncing movements a lot quicker and easier because you can immediately find the point when something else occurs and in what context. You can also bring up specific properties by, for example, pressing R to bring up rotation or P for position.



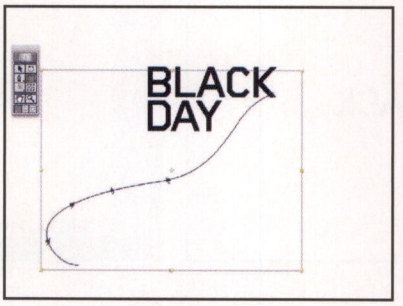
1 In this section, we'll make the barbed wire grow in a similar style to the 'right hair' layers, but by using a slightly different approach (still using masks as the key procedure). First, turn off all layers except for 'barb wire 1-6', 'black' and 'day'.



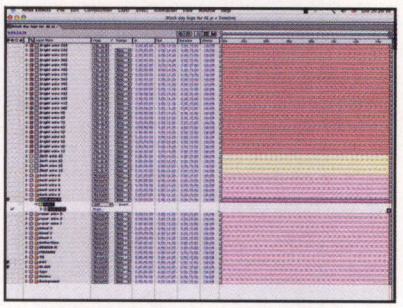
2 Double-click on the layer 'barb wire 1' in the timeline and a window containing just that layer will open. Click on the right-hand side arrow at the top of the window and select Anchor Point Path. Grab the circle with the x through it and position it at the far-right end of the wire.

3 Having moved the anchor point you'll notice that this layer has moved out of place in the main composition window. Close the 'barb wire 1' window and reposition the layer as close as you can to where it originally was. Use your *Illustrator* file for reference if needed.

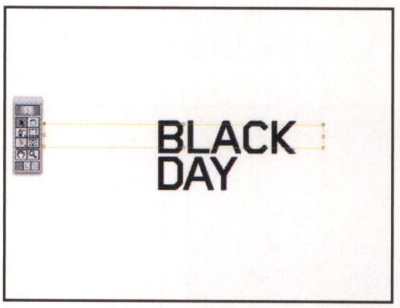
4 Repeat as above for the remaining five 'barb wire' layers. Ensure that you position the anchor point on each layer so that it sits within the typography. For instance, don't put the anchor point at the end of the wire which is not sitting within the type.



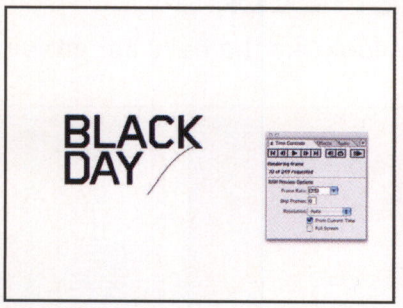
5 Turn off all 'barb wire' layers except 'barb wire 1' and go to time 09.28. Use the Marquee tool in the toolbar to draw a box around the entire shape of the barbed wire. Using the Pen tool as you would in *Photoshop,* delete all points on the box you've just drawn except for the four corner points.



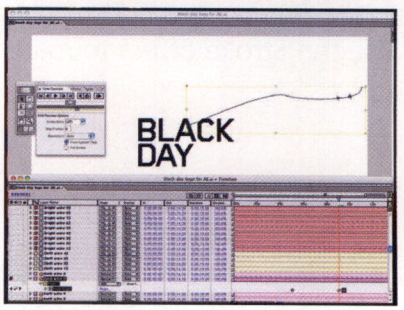
6 Create a keyframe for the mask you've just created at the current time by pressing M while in the timeline window and clicking on the stop watch. Next go to time 5.0.



7 Look at the direction that the barbed wire is growing from. As it's coming from the K of BLACK we need to move the mask so that it gives the appearance that the barbed wire is hidden. Change the shape of the mask so that the bottom two corners of the mask are just above the anchor point of the layer.



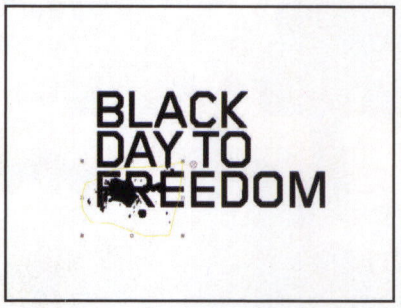
8 Do a RAM Preview to check what you've just done and then repeat for the remaining 'barb wire' layers. As with the hair layers, vary the start and finish times so that there is a bit of variety to when the layers start and stop.



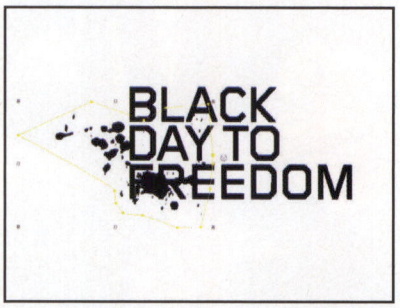
9 The mask for 'barb wire 5' has to be animated a bit differently because, if treated in the same way as the other barb wire layers, the mask when animated shows parts of the wire before it should do. Play around until you're happy with the position of the mask, using your keyframes to indicate where and when you want the mask to change shape.

Part 5: Blood and typography

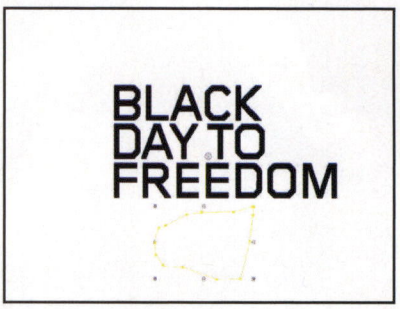
Introduce some splatter effects and get creative with the type...



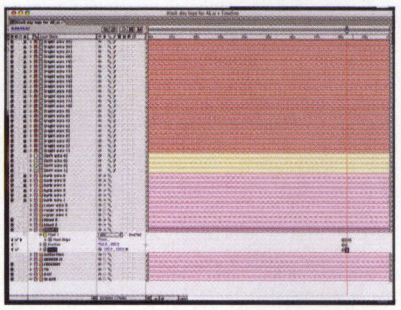
1 Turn off all layers except for 'BLACK DAY TO FREEDOM' and 'blood 1'. Go to time 8.04 and draw a mask around the bottom part of the blood similar to the above. The beauty of this, though, is that you don't have to be too exact.



2 Go to time 8.07 and modify the mask so that it extends to some of the blood further up to the left. Proceed to time 8.10 and again modify the mask so that you have more of the blood showing.

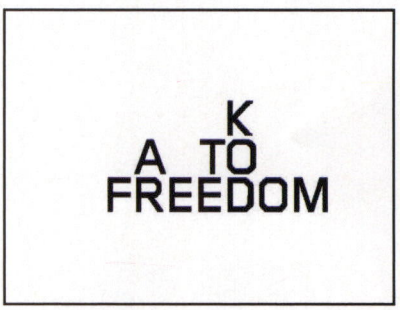


3 Go back to time 8.02 and grab all the points of the mask and move them away from the blood so that none is visible. Go to time 8.06 and press P to open the Position Timeline. Create a keyframe at your current time and then go to time 8.02 and drag the whole layer slightly down and to the right to add some movement.

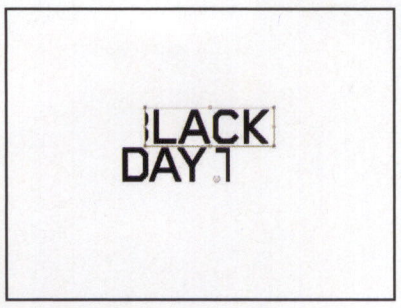


4 Go to time 8.07 and press S to bring up the Scale Timeline. Create a keyframe here of 100 per cent and then go back to time 8.02 and change the scale percentage to 150 per cent thus creating another keyframe.

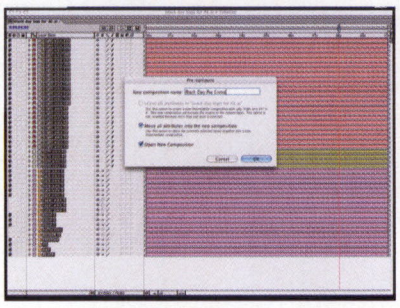
5 Repeat the last three steps for the other two blood layers, making your own choice on where in the timeline to do this and also which parts to mask off. Also be sure to create a slight movement by altering the position. It's best to do this in the same direction as you have animated the mask.



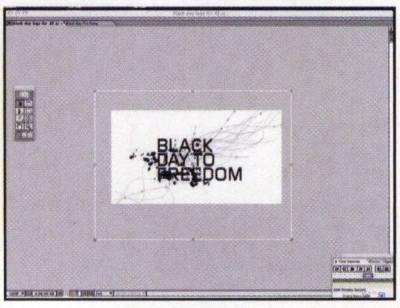
6 Go to time 1.0. Create a mask around the letter K and keyframe it. Next create a mask around the letter A of DAY and again keyframe it. Go to time 4.00 and change the shape of the mask around the K so that the entire word BLACK is visible. Do the same for the word DAY at time 3.0.



7 Select the 'TO' layer and create a mask around the entire word and keyframe it at 4.15. Next go back to time 3.0 and alter the mask shape so that it sits to the left of the word, so 'TO' cannot be seen. Do the same for 'FREEDOM' between times 5.0 and 8.0.



8 You'll notice that there are some layers that we haven't yet used. These will be used for a more advanced tutorial starting over the page. Select all the layers and go to Layer>Pre-Compose and call the new composition 'Black Day Pre Comp'. Notice how a new comp has been created.



9 Click on the original comp. Go to Composition> Composition Settings and choose a size of 480x270. Go to time 0 and press S. Create a keyframe of 120 per cent and position the comp so the A and K are visible (keyframe this position as well). Go to time 10.0 and create a scale keyframe of 50 per cent. Centre the final frame and keyframe the position. To render, select Composition>Make Movie and enjoy your 2D title sequence. ca-p

BLAZIN
ORIG
BLACK NATION VII 1TION
2X DIME DAY ANL MIX
SOURCE FILE
INCOMPLETE
RELINK FOOTAGE
METERS
FPS

Tutorial

[illustration] Rob Chiu [w] www.theronin.co.uk

Moving titles in 3D

Create flying and breaking objects to liven up your sequence further, this time in a 3D environment...

Following on from the previous tutorial, we'll now make the title sequence three dimensional using the *After Effects* 3D environment. These steps are slightly more advanced, but don't be put off by having an additional axis to play with – the only way you'll learn is to throw yourself in at the deep end.

Take a look at the ten-second movie located in the 3D space\Movies folder on CD72. As with the previous tutorial, we've left you with plenty of room to be creative and introduce other elements such as music, additional cameras and background imagery to add your own personal touches. Don't be afraid to try all these techniques with your own graphic files.

Expertise provided by Rob Chiu of The Ronin. Find out more about Rob and his current projects at [w] www.theronin.co.uk, [w] www.blackdaytofreedom.org.

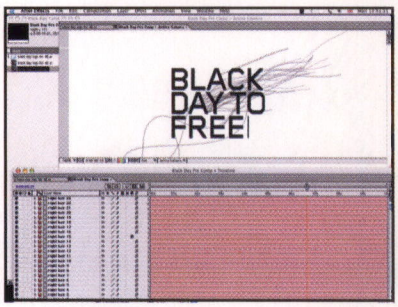
All the components needed to complete this tutorial can be found on the *Computer Arts Projects* CD72 in the Software\Tutorials\Tutorial files\Tutorial files\All\3D space folder. You'll also find the final ten-second AEP file in the same folder.

Part 1: Creating a 3D environment

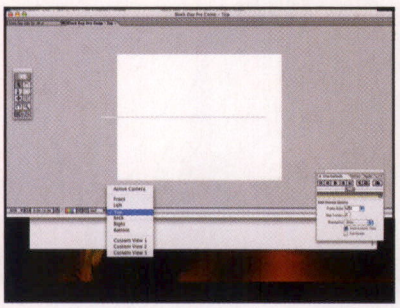
Begin by bringing your title sequence into *After Effects'* 3D environment...

Work faster

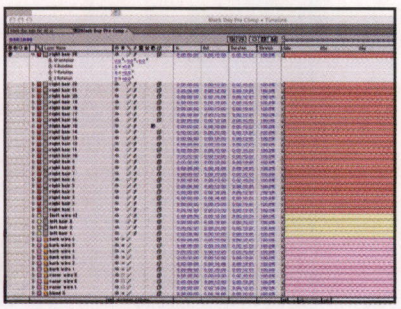
Turn off layers that you're not working on to make *AE* go faster. Also make sure you have the quality set to Draft rather than High Quality while working. Another good idea is to work at a lower resolution and size: 50 per cent and half resolution should do the trick.



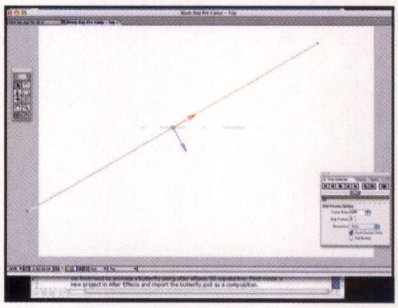
1 Using the *After Effects* project file created for the previous tutorial, we'll develop the design of the title sequence by taking it into *After Effects'* 3D environment. Open the project and click on the little 3D cubes in the timeline for all layers.



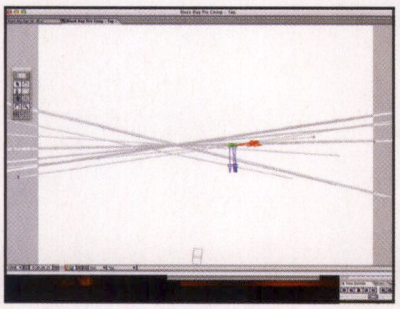
2 Next, change the view of the composition to top-down view (located at the bottom of the Composition window). Turn off all layers except for the words and the 'right hair 23' layer.



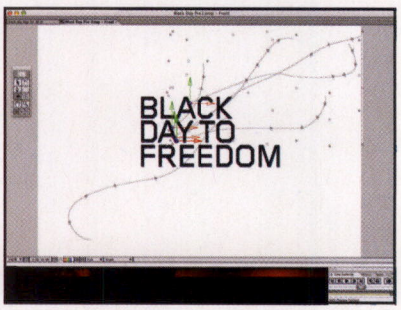
3 We're now going to make the hair layers move in 3D space. Because we've already altered the anchor points for this in the earlier tutorial, we can go straight to rotating the layers. Select 'right hair 23' and press R so that rotational properties appear in the timeline.



4 Create a keyframe of +20 degrees for the Y rotation at a time of 10.00 for the layer. Then go to time 0.00 and set the Y rotation to -30.



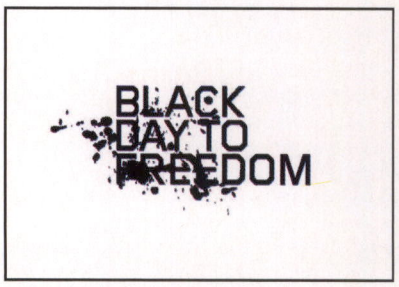
5 Do similar movements and angles for the remaining set of 'right hair' wires, being careful not to rotate the layers more than 40 degrees either way. Repeat the same for the four 'left hair' layers. Keep the hair moving as organically as possible.



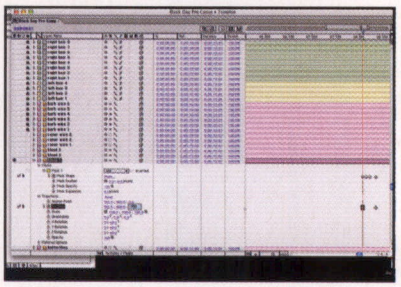
6 Leave the barbed wire as it was so that the piece still has some stability to it. The barbed wire will act as an anchor along with the type for the rest of the elements to move around.

Part 2: Adding more depth

Make adjustments to the blood to make it more effective in the 3D environment...



1 Using the same masks for the blood as with the previous tutorial, give it more of a splatter from above by deleting the Scale and Position keyframes and replacing them with some motion using the Z depth.



2 Select 'blood 1' and delete the first Position keyframe (make a note of its time) and both the Scale keyframes. Next go back to where the first Position keyframe was and change only the Z setting to -750.

3 Change the view to the 'custom view 1' setting to see just how far away the blood's starting point is. Next repeat this procedure for the remaining blood layers.

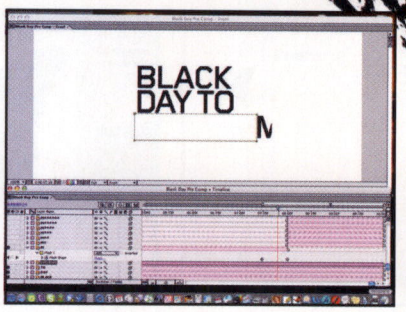
Part 3: Breaking up typography

Get creative with the type by making it look broken and battered...

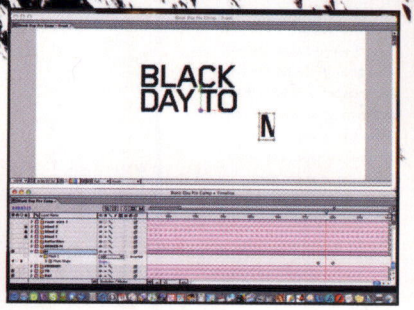
Moving layers

The arrows in *After Effects* represent the X (green), Y (red) and Z (blue) axis of the 3D environment. Select any of these arrows to move a layer through 3D space.

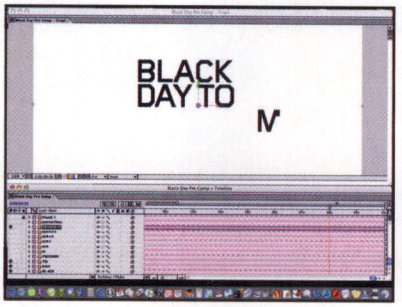
1 Open the Mask proprieties for the Freedom layer and go to 7.14. Create a keyframe here and then delete the final keyframe at 8.00, thus stopping the animation before it reaches the M.



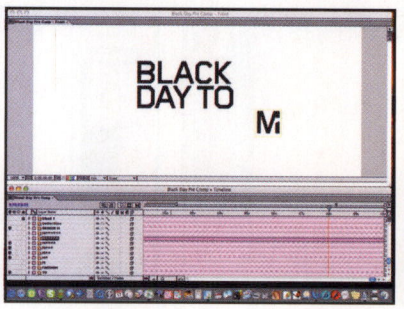
2 Duplicate the FREEDOM layer (Edit>Duplicate). Turn off the eye icon for the bottom FREEDOM layer. Open the Mask proprieties for this layer and delete the first keyframe at 5.0 and then go to 7.14 and reshape the mask so that nothing is visible using the space between the O and M.



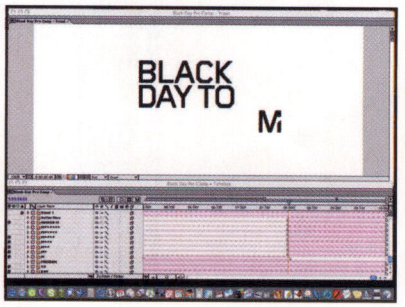
3 Go to 8.0 and make the mask only show the M. Rename the layer 'M' by clicking on the layer name and pressing Enter. Duplicate this layer at least six times so that you have at least seven M layers in total. Go to time 8.0



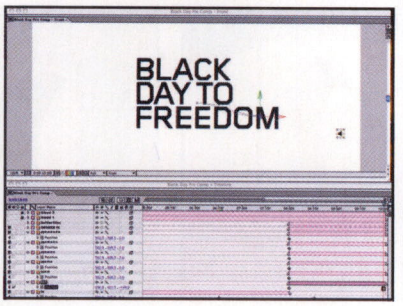
4 Clear all layer masks for the duplicated M layers (Layer>Mask>Remove All Masks). Turn on the BROKEN M mask and turn off all other M layers. There is a part of the M missing. You need to recreate this using masked elements of the duplicated Ms.



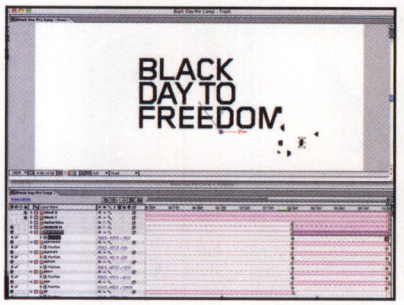
5 Select one of the M layers and draw a mask around the bottom part of the letter. Do this to all the M layers until you've filled the gap that's missing from the BROKEN M mask.



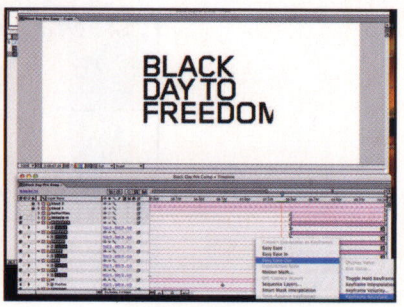
6 Select the bottom M layer, which is the complete M. In the timeline, drag the End layer handle so that the layer finishes at 8.0. Next ensure that the BROKEN M layer and all the layers that make up the broken M start at 8.0. Do this by altering the length of the layer in the timeline again.



7 At time 8.0 set a Position keyframe for each of the M layers that make up the broken M. Select M* and go to time 10.0. Move the layer away in a downwards motion. Use the blue, red and green arrow keys to navigate the layer in 3D space if you wish.



8 Do this for the remaining duplicate M layers so that by the time the movie reaches time 10.0 there is only the BROKEN M layer left in that space, thus implying that the leg of the M has broken away. Try changing the scale of the layers as they fall away.



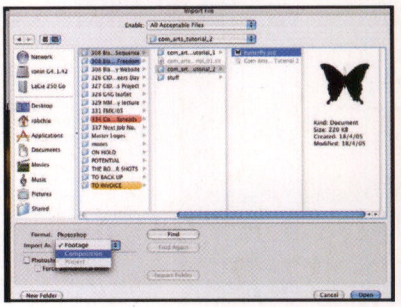
9 Click on all the end keyframes for the M layers and hold down the Ctrl key. This brings up a Control window where you can change the type of keyframe. Select Keyframe Assistant and then 'Easy Ease Out'. Notice how the movement slows down towards the end of the animation. Try this on other animated layers that use keyframes.

Part 4: Adding more elements

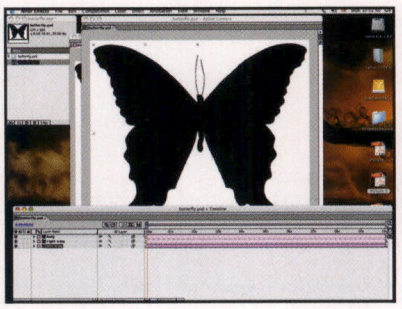
You can introduce a butterfly element to represent freedom...

Make duplicates

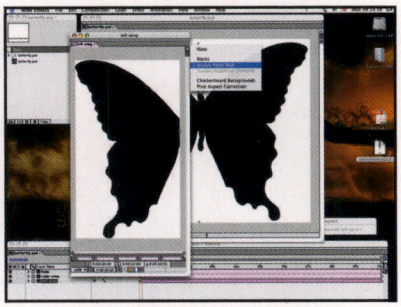
If you're worried about the re-positioning of the wings, make duplicate bodies prior to this step so that you can position the wings in exactly the same place. Also use a ruler guide to determine the anchor point positions.



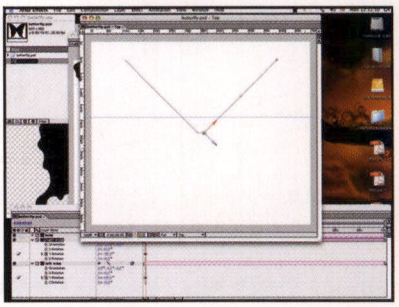
1 To create the illusion of the M of FREEDOM breaking apart and releasing butterflies, we're going to animate a butterfly using *After Effects'* 3D capabilities. Create a new project in *After Effects* and import the butterfly.psd file from the CD as a composition.



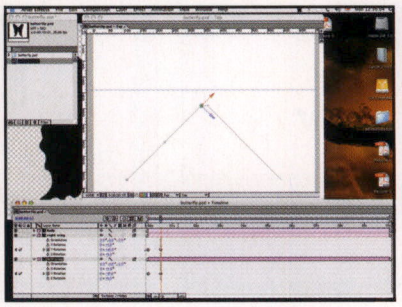
2 Activate the 3D aspect of *After Effects* by clicking on the little 3D cube in the timeline for all layers. Next, you need to change the position of the anchor point to make the wings flap from the centre of the butterfly body. Double-click the 'left wing' layer in the timeline.



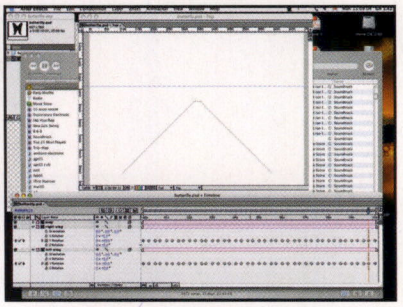
3 Change the position of the anchor point for the left and right wings so that it sits directly alongside the butterfly body. Reposition your wings, because they'll now have moved as a result of you moving the anchor point.



4 Then change the camera view, which is located at the bottom of the Composition window. The butterfly needs to be viewed from the top down, so select Top.

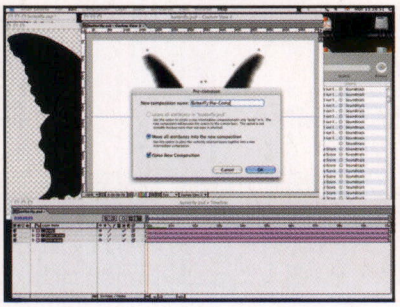


5 Select the left wing and press R while in the timeline window. The rotation properties will appear. Create a keyframe at time 0.0 for a Y rotation of +45 degrees. Repeat for the right wing with a rotation of -45 degrees.

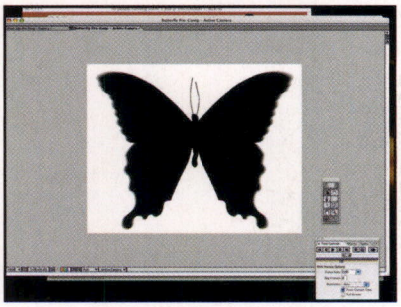


6 Go to time 0.15 and create keyframes for both wings: left wing -45 degrees, right wing +45 degrees. Then go to time 1.0 and repeat the previous step so that you have animated the butterfly's wings for one loop.

7 Select the last two keyframes of the right wing Y rotation and copy them. Go to time 0.21 and paste these keyframes so that you now have five keyframes in your timeline. Repeat until you've filled the timeline with keyframes and then do the same for the left wing.



8 Activate the high-quality switch by clicking on the diagonal line in the timeline so that it's a smooth line. Also activate motion blur by checking the boxes under the M column and then click the M button next to the frame blending button (it looks like a film strip).



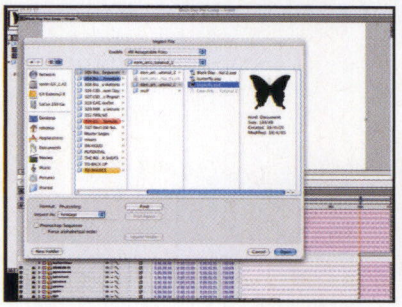
9 Go to 'custom view 2' in your View menu and use RAM Preview. You'll notice that the butterfly's wings now blur slightly as they flap. Pre-compose all these layers and call the pre-comp 'Butterfly pre-comp'. In the new pre-comp, check the Collapse Transformations box located next to the Quality box.

Part 5: Flying out of the letter M

Get down to the intricate business of making the butterfly appear from the M...

Pasting keyframes

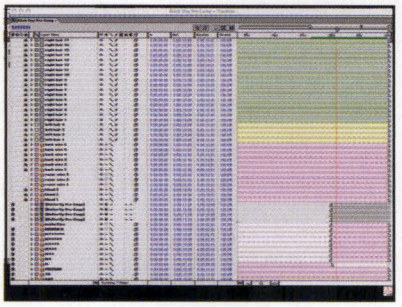
When pasting keyframes into the timeline, be sure that you're leaving a 0.14 to 0.15 time gap in-between each keyframe. Also remember to make the butterfly wings go from a minus position (-45 degrees) to a positive position (+45 degrees).



1 Import the butterfly.aep file (File>Import>File) from the CD. Go to time 8.0 and drag the butterfly pre-comp into your timeline, placing it above the BROKEN M layer.

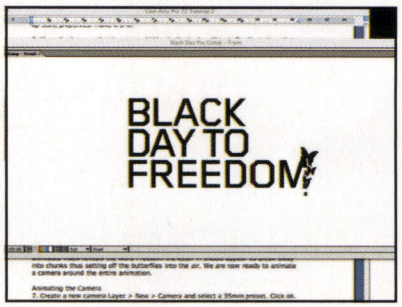
2 In the timeline, key in an 'In' time of 8.0 for the butterfly layer and Collapse Transformations. Change the size of the butterfly by pressing S in the timeline to bring up scale properties. Make it 3 per cent.

3 Move the layer so that it appears hidden in the broken M text. Duplicate it so that you have at least three or four butterflies of varying sizes hidden in the text. Create Position, Rotation and Scale keyframes for them.



4 Because the butterflies are all duplicates of each other, try starting the butterflies at different times in the timeline so that they don't all fly in sync with each other. Be sure that all the keyframes begin at 8.0 and that the butterfly is invisible until this time.

5 Go to time 10.0 and move the butterflies away from the breaking up of the M. Try rotating the butterflies by about +20 degrees or so as you move them away. Also try changing the scale of them so that they get bigger as they fly away.



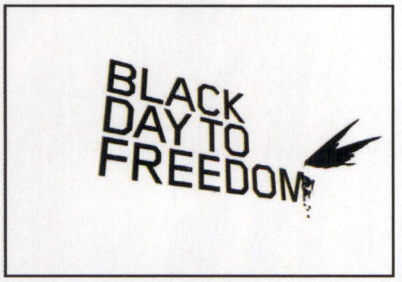
6 Use RAM preview with only the words and butterfly layers turned on. As the animated mask reveals the word FREEDOM, the letter M should appear to break away into chunks, setting off the butterflies into the air. We're now ready to animate a camera around the entire animation.

Part 6: Shooting considerations

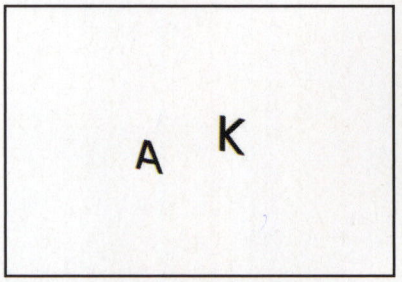
Animate the camera so that your titles move in exactly the direction you want them to...

Over to you

Try animating different cameras around the animation and editing them together to music to create a dynamic intro sequence. You'll notice that the 'razor wire' layers have remained unused throughout both tutorials. These are for you to experiment with now that you have a better understanding of how to use *After Effects*. Be creative, and have fun with what you do.



1 Create a new camera (Layer>New>Camera) and select a 35mm preset. Click OK. In the timeline select Camera 1 and click on the little triangle to bring up the Transform proprieties. Use these settings for the camera position: x 199.4, y 635.9, z -581.4. Go to the last frame and check that your camera looks like the illustration.



2 Create a keyframe for this position as your end frame. And also keyframe the point-of-interest timeline with x 407.5, y 464.0, z -182.2. Go to time 0.0 and input these co-ordinates into position: x 876.8, y -35.8, z -721.0. Also keyframe the point-of-interest timeline.

3 Change your comp size to 1024x576 (16:9 widescreen). Apply the adjustment layer technique mentioned in the previous tutorial to make the elements white out of black and then render the entire animation with all the layers on. ca-p

Above: Unnamed members of Minivegas hard at work in the studio and on location. Its studio, just north of Brick Lane, "ensures the collective finger remains firmly on the pulse."

Right: Minivegas came second in a Ninjatune competition to "visually score" Blockhead's album *Music by Cavelight*. Each track retains a trademark synchronicity, in this case reminiscent of Oskar Fischinger's seminal post-war graphic experiments.

EGAS MINIVEGAS MINIVEGAS MINIVEGAS M

[w] www.minivegas.co.uk, [w] www.pixelshifter.nl

Minivegas

Located in a concrete-chic live/work studio at the heart of Shoreditch, self-styled start-up collective Minivegas are, on paper at least, prime candidates for 'nu meeja dahlings of the year'. Are they cast-iron Ashcroft, or just a load of old Barley?

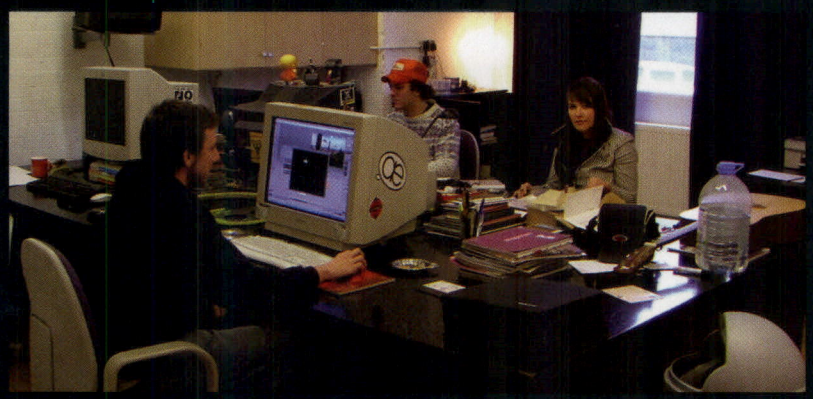
The premise is typical: a group of friends meet while studying at university, realise they share a love of music, film and drinking, and decide to form a collective. Some of today's most respected motion graphics studios began their lives scrawled on the back of a beer mat: Shynola, Pleix, Lynn Fox... the list goes on. What separates Minivegas from the rest of the 'up-and-coming' chaff, is a potent combination of passion, professionalism and, crucially, flexibility. In essence, Minivegas is less a collective, more an extended family of gifted digital artists, bound by a universal affection for pixels and beer.

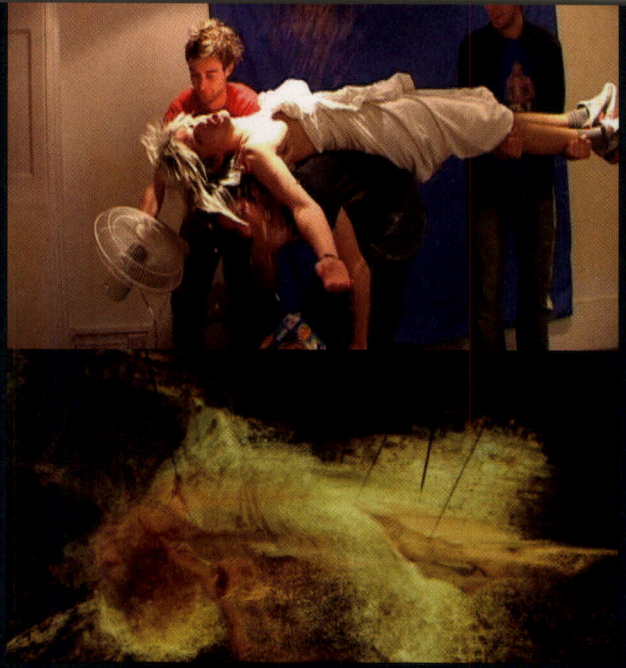
The foundation for this zen-like creative arrangement was laid when part of the group, who would prefer to remain nameless, met while studying at Bournemouth's NCCA. Their backgrounds in a diverse range of fields, including animation, special effects and TV production, led swiftly on to a series of jobs at top London production houses MPC, Glassworks, Framestore CFC and Jim Henson's Creature Shop. However, it took an unmissable opportunity to direct a promo for Plaid's *Zeal* to prompt them into collaboration.

Free for all

Produced and part-financed by Whitehouse Pictures' Kit Hawkins, it exemplified the assets of their freely configurable working process, as well as a characteristic openness to circumstance. "It was basically a lot of people just coming together," they recall, "DPs, set designers, the lot. Everyone was willing to do it for free or on expenses." The three-month job was a crash course in filmmaking for all concerned but, most importantly, an opportunity to capitalise on the diversity of their skills. What the team lacked in directing experience, they made up for in abundance with post expertise. The synthesis of their 2D and 3D specialisms resulted in an impressively polished finish from a decidedly skeletal budget.

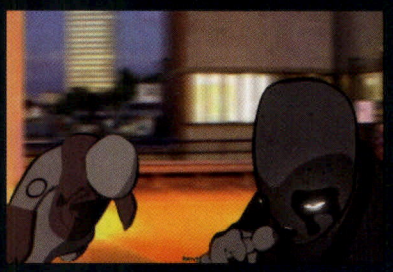
The relationship forged with Kit Hawkins, combined with the exalted reaction to the Plaid promo, led on to their next project for ›



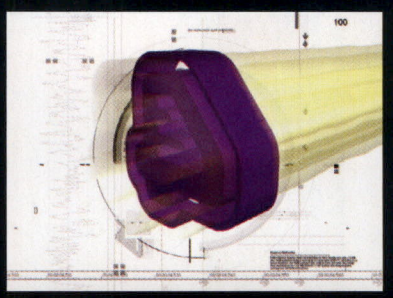


Above and left: The collective's breakthrough promo for Plaid's *Zeal* was shot in a catacomb-like network of tunnels underneath Jim Henson's Creature Shop, the location itself providing much inspiration for the project. "It was incredibly eerie," they remember. "The rats are CG, but we needn't have bothered!"

Left: A textbook example of how to create professional work on no budget, this promo for London-based band WOMB was heavily treated in post. Initial rushes "had that really crappy DV look." The solution: intensive colour correction and a dynamic interpretation of the song's title *Black Lines*.



Left: Far from resting on its considerable laurels, Minivegas is embroiled in constant R+D. This "toon shaded" film is a collaboration with friend and character designer Mysterious Al. Characters are initially created in 2D, before being brought to life using *Maya*.



Left: Designed as a response to the *Creative Review* E4 competition, this *After Effects*-crafted sting took just a few hours to complete. It was, as they put it, a "direct response to the brief."

NIVEGAS MINIVEGAS MINIVEGAS MINIVEGA

Live Aid 1&2

An immense amount of preparation went into this Geldof/Curtis commissioned spot for Live Aid and Make Poverty History. High-end *Flame* compositing was carried out at Glassworks to depict the physical processes of malnutrition on the body of a child. Despite its joy at securing the pitch, the group was conscious of an uncomfortable paradox at the heart of the shoot. There was, as Minivegas saw it, an awful irony in the "amount of money being spent to 'recreate' poverty in a studio environment."

Keane

The multifaceted campaign for Keane was a significant turning point for Minivegas, in both its scale and remit. Initially commissioned to create a series of adverts, the band was keen (no pun intended) to explore the experimental capacity of a potentially stifling brief. "Traditionally, these kind of spots are fairly generic," Minivegas points out. "It's all focused around the packshot at the end." Its solution was to change the logo into a stylistic feature, and use a mixture of 3D modelling, high-octane editing and *After Effects* filters to transform the footage.

Due to a hectic tour schedule, Minivegas was forced to film in the band's hotel room, using customised laundry racks as 3D references. "Keane weren't particularly happy," Minivegas recalls. "We shifted all their furniture into the bathroom to create extra space, but their performances were still a little lacklustre." To compensate, footage was sourced from previous promos and live concerts. The piece was put together while one member of Minivegas was travelling with the band as tour VJ, which was far from ideal.

Mercury-nominated band Keane. Pitching against a swathe of specialised production companies, their chances of securing a commission were slim from the outset. The band took a shine to Minivegas' *Photoshop*-heavy line-art pitch. It was an audaciously radical treatment for such a mainstream client, but the collective negotiated an elegant balance between the suffocatingly constrictive house style and the desire to push themselves creatively. Interestingly, Minivegas "didn't actually like the music." It's an uncommonly frank admission, but one which illustrates the atmosphere of understated confidence in the studio. Rather than tow the line for an uninspiring yet commercially significant brief, they felt comfortable enough to challenge the client head-on, arguably the hallmark of the most successful creative teams.

Going global

Clearly pleased with the results, Island commissioned Minivegas to create visuals for Keane's global tour. Two more ads and one more tour followed soon after, firmly establishing the collective's capability to deliver an original and cohesive campaign. The tours proved an ideal opportunity to premiere an experimental real-time graphics synthesiser, codenamed rDog, that had been developed with a close personal friend and Glassworks software engineer. This subsequently evolved into their "sister company" Pixelshifter: an outlet for the group's more experimental follies.

Minivegas is clearly motivated to maintain this output of self-initiated work, stating it would "ideally be making shorts all the time." Fortunately for its bank manager, the steady flow of jobs has prevented this. A landmark commission for Live Aid is the high point of a plethora of recent projects, ranging from VJing at the ICA, to competitions for Ninjatune and *Creative Review*. It's this nuanced balance between commercial and personal work that so visibly enriches the quality, and diversity, of the company's reel. It certainly seems to validate its desire to assemble a project-specific team for each job. The flexibility this affords probably goes some way to explaining why Minivegas' clients keep coming back for more.

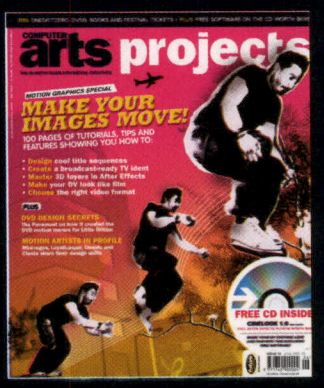
Currently in talks with a number of highly respected production companies, it won't be long before Minivegas makes the transition from spare-time freelancers to full-time industry heavyweights. What's more, the briefs are rolling in. With two top-line jobs on the go, and more in development, there's a genuine feeling in the studio that it's on the cusp of something very special. The key to its future will be to balance its endearingly casual manner with the rigorous commercial pressures of contemporary production. If Minvegas can manage that, the future will surely be more 'trashbat' than trucker cap. **ca-p**

SUBSCRIBE WORLDWIDE!

SAVE MONEY, WHEREVER YOU ARE...

- Based in Europe? €95
  (You will be charged £65 sterling)
- Based in US/Canada? $99
  (You will be charged £56 sterling)
- Based anywhere else in the world? £80

- Take advantage of this hassle-free way to get the ultimate international designer's resource delivered straight to your door every month
- Save money on standard newsstand prices
- Never miss an issue of your favourite mag
- All issues delivered by Airmail


arts
MOTION GRAPHICS SPECIAL
MAKE YOUR IMAGES MOVE!
100 PAGES OF TUTORIALS, TIPS AND FEATURES SHOWING YOU HOW TO...
FREE CD INSIDE

To subscribe now, visit

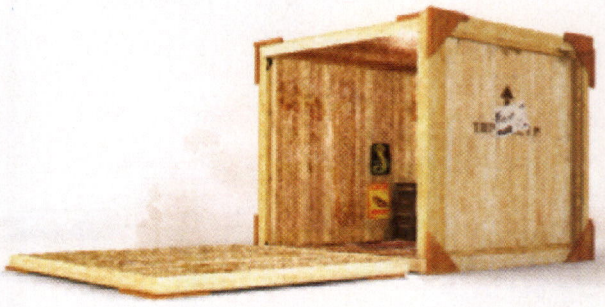
www.myfavouritemagazines.co.uk/cos/M007

or call +44 1858 438 794 (quoting ref: M007)

If you're not completely satisfied, you can cancel your subscription and receive a full refund on any unmailed issues

Above: Two of HYPA.tv's idents created for Virgin Atlantic, inspired by the work of Saul Bass.

Below and right: Idents for music channel Fuse, by Helios Design Laboratories.



Feature

Idents parade

Idents have become a major form of branding for any TV channel worth its airtime. We find out the secrets of making an arresting impression...

Time was when all a TV channel needed in the way of corporate branding was a logo – and if it was particularly swish, an animated one. But in these days of numerous satellite and cable channels all competing for attention, that humble logo has grown into the all-encompassing ident.

While every ident should incorporate a channel's logo, it needs to do much more than that. Beyond simple branding, and reminding the viewer just what they're watching, idents have become sophisticated animations in their own right. Some are so good that they're better than the programmes they bookend.

A good ident has to represent the channel's ethos and programming, be visually arresting and innovative, perhaps amusing and often make some sort of narrative sense – all within the space of ten seconds or so.

MTV pioneered this approach with its ever-morphing logo and animated stings, created way before computers were the norm. Channel 4's original animated logo was similar in its strive for modernity, and its current generation is just as innovative. The famous BBC2 idents, featuring endless superb variations of the '2', are fun, intelligent and quirky, in the same way that the channel is meant to be.

Creating a successful, adaptable and relevant ident is a stiff challenge, but it's one that many designers relish, because a good ident idea can be on screen many years after the original commission.

Image conscious

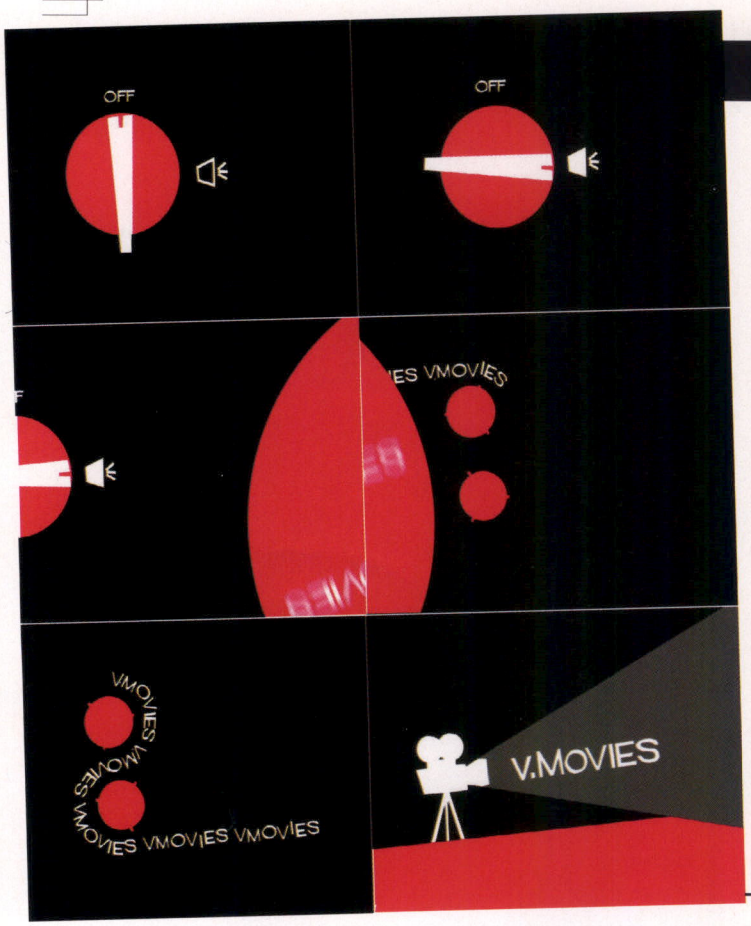
The branding of five – previously Channel 5 – has traditionally been fairly simple, recently revolving around the word 'five' in various incarnations. This theme was continued in the customised idents currently shown before their movies, which were created by FunktionDesign (**[w]** www.funktiondesign.tv).

The straightforward brief behind these idents was to create a call to action and anticipation in the viewer. It's the equivalent of the lights going down in a cinema, and needed to work with all genres of film.

Five is very protective of its image, says Tobin Goffe, Creative Director at FunktionDesign: "Five has strict guidelines concerning idents: the 'five' was always 2D and the overall look was very clean. But it was keen that 'five movies' idents had their own identity, so there was some flexibility." >

Right: A selection of idents shown before films on five.

Left: *Close Shave* is another of Helios' pieces for the Fuse channel.



Virgin territory

If you're looking for clients who might be interested in your motion graphics work, don't just think terrestrial and satellite TV – there are many other channels screaming for your work. HYPA.tv is a motion graphics, post-production and animation company founded in 1997 and based in the UK. Although the company has only two employees, it has produced advertisements, idents and branding for the likes of Abbey National, Five and Asda. Creative Director Mark Allin discusses HYPA.tv's recent work on idents for Virgin Atlantic.

What was the general brief?
To create new title sequences/idents for the 13 different channels on Virgin Atlantic's award-winning in-flight entertainment system that convey Virgin Atlantic's brand values of wit and innovation.

Did Virgin approach you, or did you pitch?
Virgin approached us for the pitch. We had done a previous project for them, although that was around five years ago.

What sort of approach did you take initially, and how many variations did you submit?
We had a month to turn around the pitch and present. This gave us time to conceptualise about the route we wanted to go, and then we had three days to put this into storyboards. Virgin stated in its proposal that it liked the work of Saul Bass, so we opted to present all of the storyboards in the same style. We presented around eight finished storyboards and the remainder as written scripts, along with music styles and a budget. Of those eight storyboards, the final delivered files were almost exactly the same!

We wanted clean animations, with fluid transitions to eliminate any edits. We wanted to give a twist to the typical 2D animation and create the project in 3D. We tried to be as minimal as we could be.

What software did you use?
Around 90 per cent of the work is 3D, which we created in Maxon's *Cinema 4D*. The final composite was created in *After Effects*.

How long does it typically take to create an ident, or does it vary wildly?
Generally, anything from a day up to three to four weeks depending on the complexity of the 3D animation. For Virgin, the idents took four to six days each. We wanted to make all of the idents within a month to give ourselves the time to look at the animations as a whole to ensure consistency in the style.

Below: Helios' work on idents for the Fuse channel was freeform and eclectic, to say the least.

In this case, the live action elements of the idents were directed and shot at five, while FunktionDesign post-produced the effects and animation in *After Effects*, *Softimage XSI* and *Media Illusion*. "The time it takes for an ident varies wildly depending on the complexity," explains Tobin. "In this case, it involved live action plus 3D elements including boats and planes, and finally a lot of compositing."

Be prepared to pitch, he adds, but don't always expect a fee for it. "I've heard of nine companies pitching for a series of idents, which is ridiculous and morally wrong. I prefer working closely with clients and getting them involved in every aspect of the production," explains Tobin.

Making history

Kieran Hughes of Reelviews (**[w]** www.viewreel.com) is a Creative Brand Consultant who specialises in independent film, documentaries and education. He became a Broadcast Design Assistant for the BBC in 1987, and since then he's produced a number of idents for the likes of BSkyB, Sky Sports, The Travel Channel and The History Channel.

Kieran describes the process of working with The History Channel: "I didn't have to pitch for the work, per se, but I did have to present ideas to the editorial staff at the channel. Following the presentation of a few very different ideas, the 'passages of time' was the metaphor we chose to best express The History Channel brand. The idents would feature the logo being aged or weathered by various agents of time."

But this was far from being the first choice. One idea, featuring testimonials of the channel by various discerning viewers, was rejected because it had already been used, unbeknown to Kieran. Another, showcasing famous historical artifacts such as the spoon that stirred the tea that Winston Churchill drank, was rejected for practical and legal reasons.

Eventually, Kieran and the team settled for 12 30-second idents featuring sand, water, wind and fire eroding the standard logo, a stylised 'H'. "We made the decision to shoot all the idents on 35mm film, using special motion control equipment, at Pinewood Studios, to enable us to replicate the same move across the different renditions of the channel logo and for various live action effects."

Editing and effects were produced in Discreet's *Flame*, a standard high-end production tool for motion graphics. This was followed by telecine and film grading, then transfer to video. Post-production and editing took around two weeks, and the whole process took three to four months, from storyboard to final delivery.

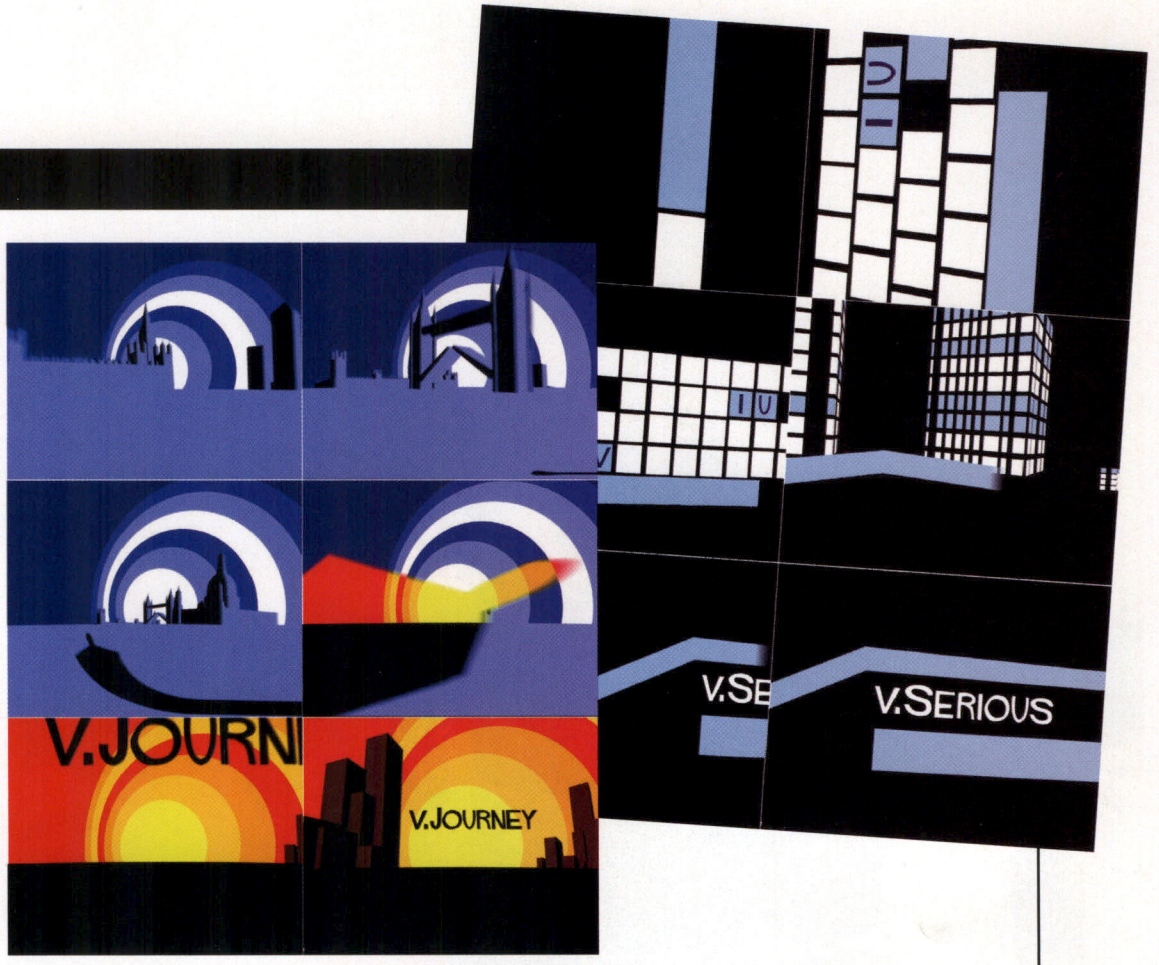
Although these idents were produced on relatively high-end equipment, Kieran doesn't think that's necessarily important to getting a good result. "Learning the principles of broadcast design at the BBC was quite conservative, which I believe is the best way to start out," he says. "Strongly formulaic: colour, composition and typography were the main components of

How much input does a client have? Do they generally let you get on with it?
Advertising projects tend to be well-scripted but need the facility to tweak the animation quickly. Broadcasters tend to have a concept which we can adopt to a relevant style. Pitches tend to be completely open, while adhering to the corporate guidelines of logo placement, typeface and so on.

How often do you have to pitch?
We have to pitch around six to seven times a year, for medium to large projects. Typically we can produce around 40 projects per year for projects ranging from broadcast, advertising and film.

What's the best way of getting noticed?
A difficult question to answer...
- Great work
- A strong showreel
- Never letting your customer down
- The online community (1,500 to 2,000 showreel downloads per month)
- Attention to detail
- Developing new relationships

To see all the Virgin idents and some of HYPA.tv's other motion graphics work visit [w] www.hypa.tv.



good and effective design. Less is more: learning the virtue of simplicity.

"The computer we used was slow and very limited and this was beneficial in an accidental way... free from the temptation of overworking the design with filters, gimmicks and flashy effects. Filters and effects should definitely be used sparingly."

Idents with attitude

Fuse, an American music channel laden with humorous attitude, is a very different beast to The History Channel. So when Fuse wanted a new crop of idents, it approached Helios Design Laboratories – a multimedia design company known for its in-yer-face approach ([w] www.heliozilla.com).

The general brief was loose, to say the least. "I'm not sure there was one. If there was, we probably didn't read it," says Mike Robbins of Helios. "Fuse just wanted a bunch of ten-second idents and for them all to be different. They didn't have a ton of cash but they were smart about paying with artistic freedom. We did have to submit boards for them to approve, but they ended up going for everything except the one about the gay riot cops."

The only real criteria was to make the idents bizarre and funny, so Helios came up with ideas separately and grouped them into various concepts. The end result is a mixture of live action, animation and 3D. "Direction by the client was rare and usually a request to 'make it more insane'," adds Brad Abrahams. "Ultimately, the process was one of controlled anarchy."

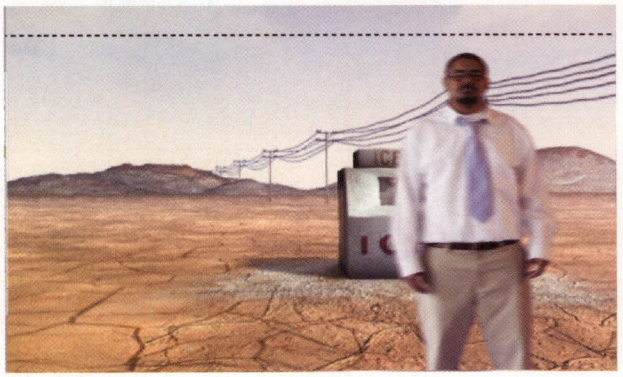
"For the 'Nuts' spot we bought some wigs and costumes, and talked the manager of a local supermarket into letting us shoot for free," explains Mike. "We shot the footage on DV and had the actor move really slow and then chopped frames out in *Final Cut Pro* to make it look jerky and robotic.

"We then modelled the interior of the control room in 3D," continues Mike. "The squirrel we rented from a taxidermist and shot it as digital stills and did the stop-motion animation and compositing in *After Effects*."

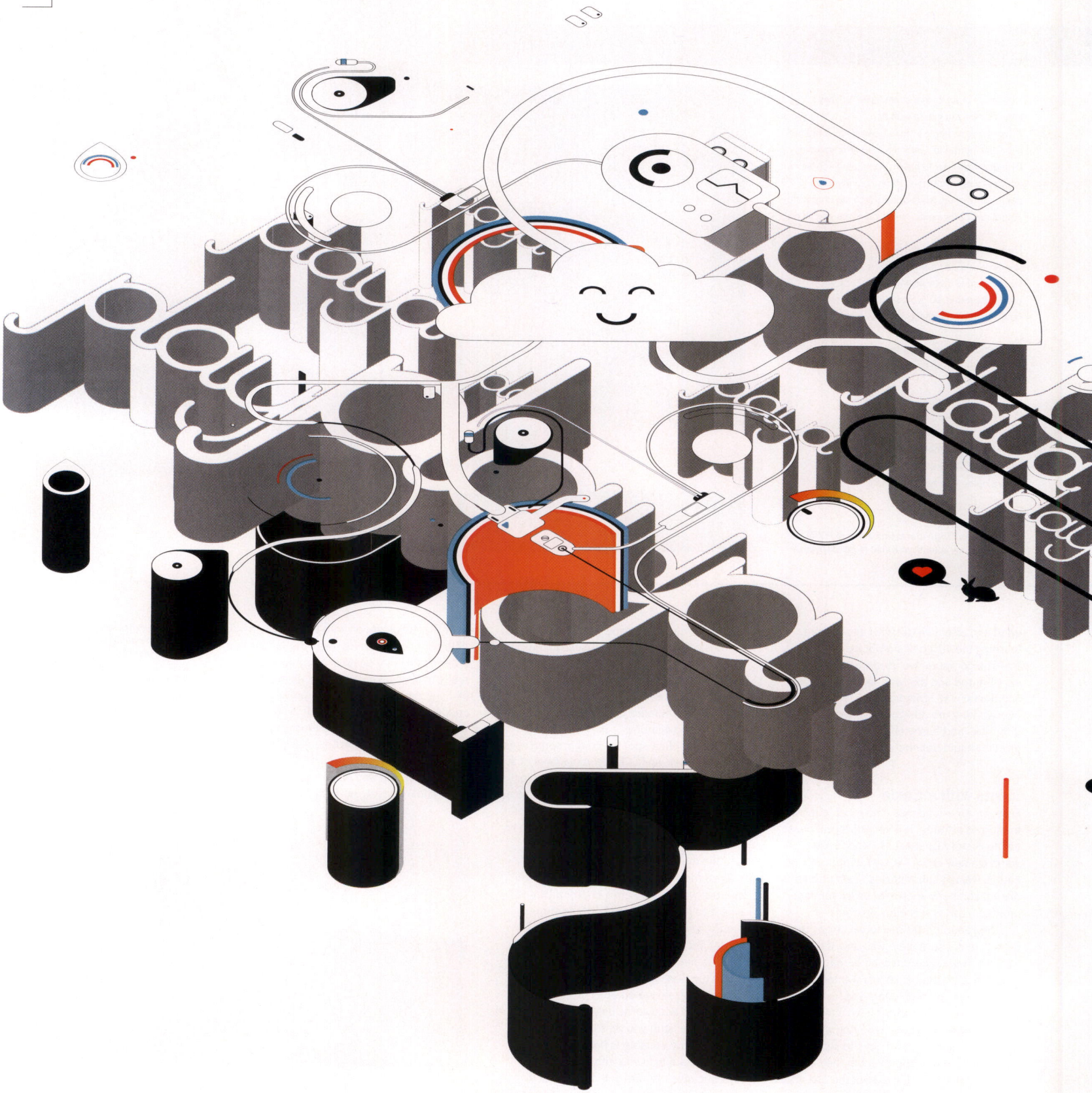
But the process can vary wildly from client to client, according to Mike: "Getting storyboards signed off on is pretty key. Being good with words helps, or having examples of stuff you've done before to show. The big variable is how quickly the client gets back to you with feedback, and how decisive they are with their input."

That input may be considerable or, in the case of Fuse, entirely minimal. Clients who are used to commissioning idents are more likely to let you get on with it, believes Brad. "If they're not so familiar with the process, or if there's no clear chain of command, you really have to take charge of things and manage the client. That's why getting the concept and boards signed off is so important. The client will ultimately respect the budget and the deadline – that's your last line of defence."

And the best way of getting noticed? "Take a lot of hostages." ca-p



Below: "If there was a brief, we probably didn't read it," says Mike Robbins of Helios on its Fuse idents.



[illustration] James Wignall **[w]** www.mutanthands.com

Create a TV ident

Make a short piece for broadcast by animating *Illustrator* and *Photoshop* files in *After Effects 3D*...

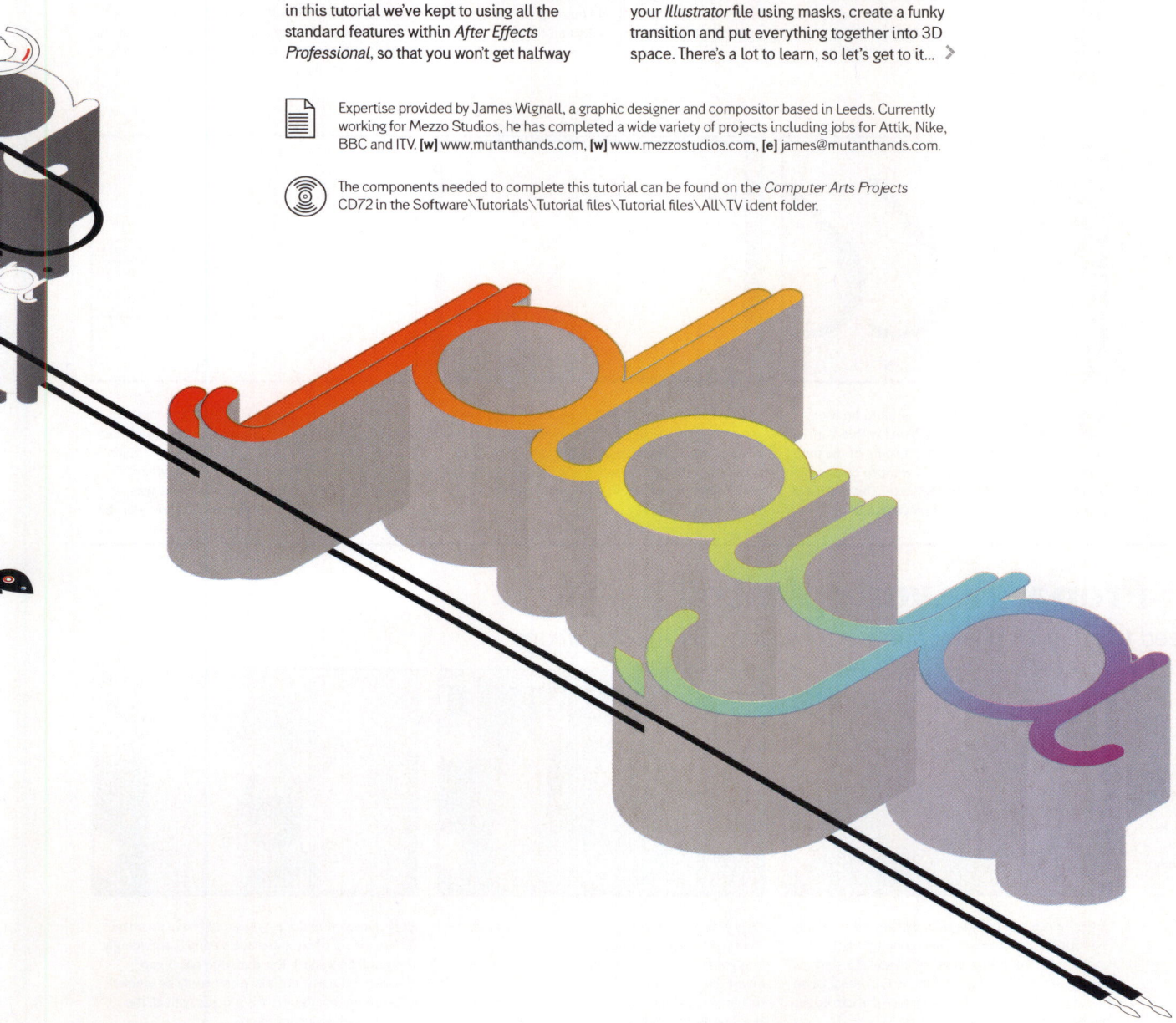
Ever wondered how television channels make those funky little idents? Well, we're going to show you, and with no 3D software knowledge required at all.

In *After Effects* (just like in *Photoshop*) there are many ways of achieving various effects, but in this tutorial we've kept to using all the standard features within *After Effects Professional*, so that you won't get halfway through and realise you need to splash out some of your hard-earned cash on a plug-in you'll only use once.

Throughout this tutorial we're going to show you how to set up your *Illustrator* files so they're ready to be animated in *After Effects*. We'll also tell you how to set up a *Photoshop* file, animate your *Illustrator* file using masks, create a funky transition and put everything together into 3D space. There's a lot to learn, so let's get to it...

Expertise provided by James Wignall, a graphic designer and compositor based in Leeds. Currently working for Mezzo Studios, he has completed a wide variety of projects including jobs for Attik, Nike, BBC and ITV. **[w]** www.mutanthands.com, **[w]** www.mezzostudios.com, **[e]** james@mutanthands.com.

The components needed to complete this tutorial can be found on the *Computer Arts Projects* CD72 in the Software\Tutorials\Tutorial files\Tutorial files\All\TV ident folder.

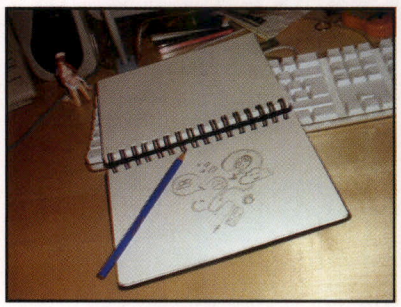


Part 1: Setting up your illustration

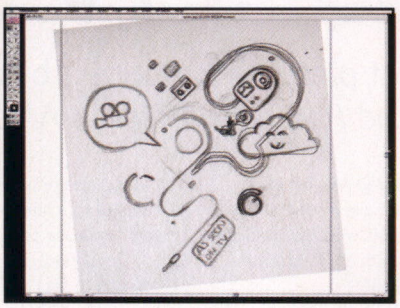
Set up your *Illustrator* files so they're ready to be imported into *After Effects*...

Planning your work

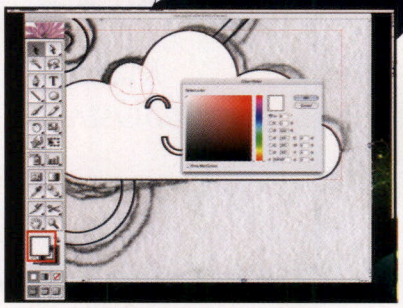
Grab a sketch pad and draw out your ideas. Once you have an idea, storyboard it. This saves a lot of time later on when you're thinking what to do with all the funky camera moves. Have a clear idea of what you want to achieve before you start.



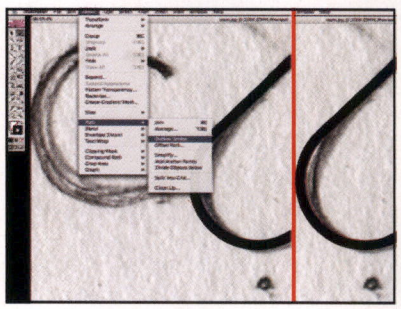
1 As tempting as it is to dive straight into a program, it's always better to take the time to plan what you want to do. After an initial brainstorming session, we came up with the main design we wanted to animate.



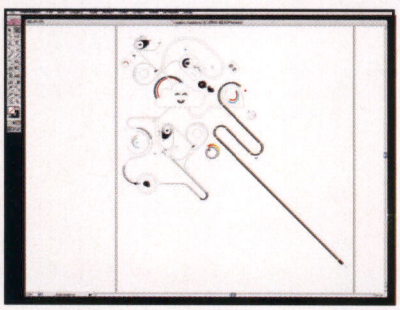
2 Scan your sketch, then import it into *Illustrator* and start tracing it and refining the design. The main tool to use for this is the Pen tool (P).



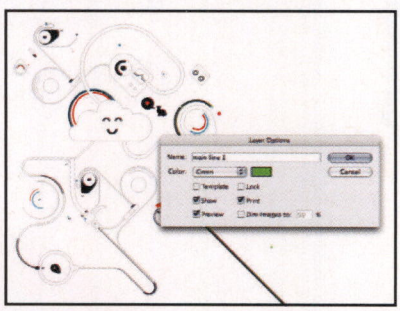
3 Once you've finished re-drawing your sketch, you need to fill in the shapes. Select the shape you want to fill then double-click the 'fill' box at the bottom of the toolbar on the left, then simply select the colour you want.



4 We want some of the line work to be filled with a solid white and outlined with a thin black line, so we need to convert some of the paths into outlines. Select a path you want to outline then select Objects>Path>Outline Stroke. This will leave you with the outline of your previous line.



5 When you've finished your design, you need to set up the file so it's ready for *After Effects*. All the parts that you want to animate need to be on a separate layer, so select and cut (Ctrl/Cmnd+x) your object, make a new layer and paste the image into it (Ctrl/Cmnd+v).



6 This is where naming your layers becomes important. We split this design into three main areas and used prefixes ('ul' for 'upper left', 'main' for 'main' and 'l' for 'lower'). This helps when looking for objects later on. To rename a layer simply double-click it and type in whatever you like.

Part 2: Preparing your photos

Now you need to get your digital photographs ready for the transitions...

Tidy projects

When you're working in broadcast it's pretty much inevitable that you'll be asked to change various things within your project. To make it as hassle-free as possible, it's always a good idea to structure your *After Effects* projects, with a folder for Compositions, Footage, Audio and a Final Render composition.

1 Choose two of your own digital pictures to use for the transitions between one figure to another. In *Photoshop*, open an image and start cutting around the figure using the Polygonal Lasso tool (L). This tool will give you a nice smooth edge, but it's a time-consuming process.

2 After you've cut out your figure, duplicate the layer (Layer>Duplicate) then using the Polygonal Lasso again, cut around an arm. Now invert the selection (Shift+Ctrl/Cmnd+I) and press delete. Repeat this for the five main parts of the body (right arm, left arm, head, torso and lower body). Each part needs to be on a separate layer.

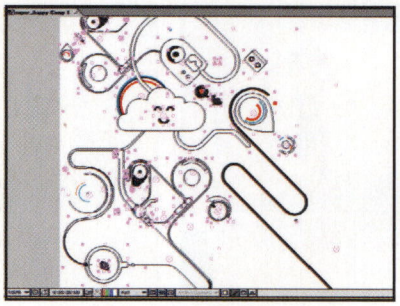
3 Once you're done, you should have an image made up of separate layers named accordingly. There will be a small (less than one pixel) gap between the parts, but this won't really be visible when animated. Repeat this process with all the other images you want to use.

Part 3: Animating the Illustrator file

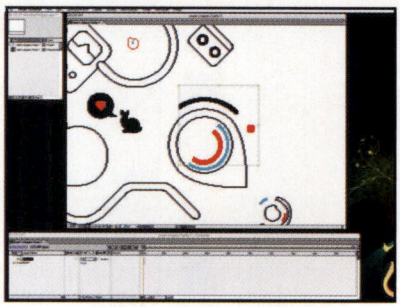
How to bring in your file correctly and animate the lines and elements...

Nesting

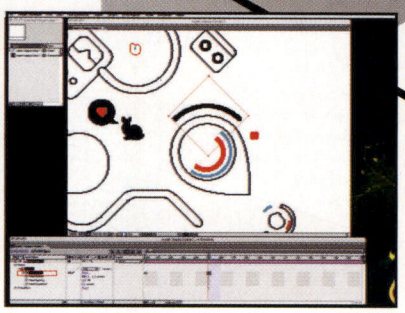
Nesting (also known as pre-comping) is when you have a composition within a composition. This is good for a number of reasons: first, you can make alterations quickly and, second, it helps a lot with organising your projects.



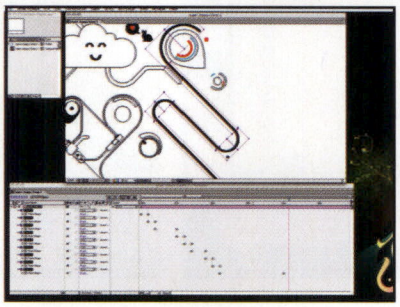
1 Once you've imported the file (make sure Composition>Cropped Layers is selected) it should look a bit like the above. Now you need to start animating the picture. It's a good idea to start with the larger objects first, such as the big lines.



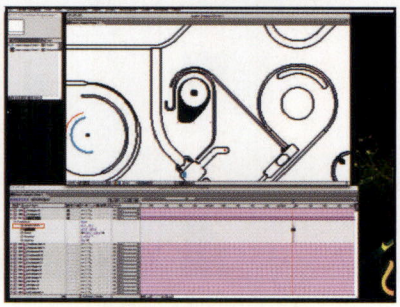
2 Start with 'main line 2' layer. Select a Rectangular Mask tool (Q) and draw out a square. To rotate the mask, double-click any of the corners and rotate it as you would in *Photoshop*. Make as many masks as you need until the layer is completely visible again.



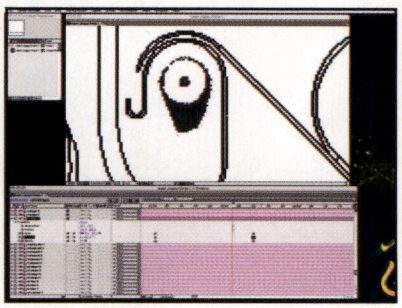
3 Now it's time to start animating them. Click the triangle to the left of a mask layer. We find it easier to animate backwards, so move the timeline indicator a few frames down and click the stopwatch icon next to Mask Shape to create a keyframe.



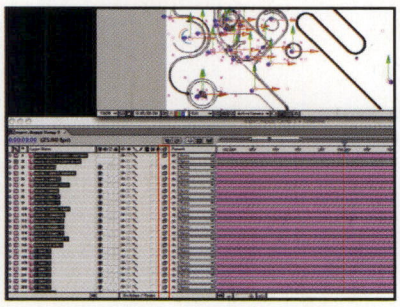
4 Move the timeline indicator back to the beginning, then move the points of the mask so that none of the shape is revealed. A new keyframe will be created. Repeat this for all the masks and then stagger the keyframes. It should end up looking something like the above.



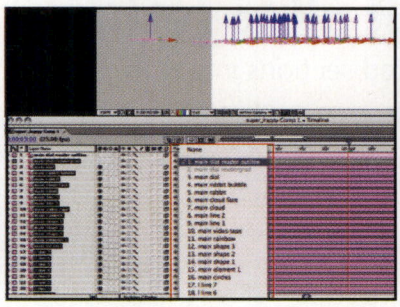
5 Now you can move on to the smaller shapes. Because of the way *After Effects* imports files, you'll need to alter the Anchor Point (the part around which the object will rotate). Clicking the triangle next to Transform on a layer will make this option available.



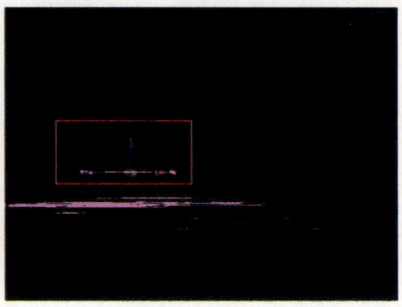
6 Animating the shapes is the same process as animating the mask. Click the stopwatch to make a keyframe, move the timeline indicator, change the values and it makes another keyframe. Here we made the shape grow (Scale) and fade (Opacity), with a slight rotation.



7 After you've animated all your shapes and lines it's time to put things into 3D space. Select all your layers and click the empty square below the 3D cube icon. Some arrows will appear on your shapes in the Preview window to indicate they're now in 3D space.



8 You need to rotate all the layers to make them horizontal. So, select all the layers except the top one, click the parent box and select the top layer from the list. Click the layer you parented and rotate it -90 degrees on the X rotation (so the arrows point up). Now select the layers, click the parent box again and select None from the list.



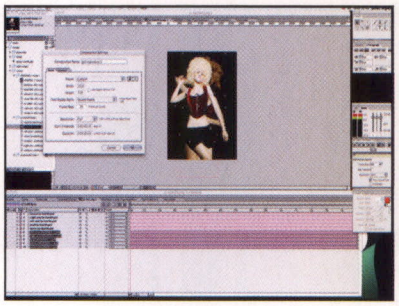
9 To give a better illusion of depth, it's good to space out your shapes along the Z axis. To do this, select one of your shapes and drag the blue arrow (Z axis) to where you want it to be. Repeat this with as many shapes as you like.

Part 4: Turning one figure into another

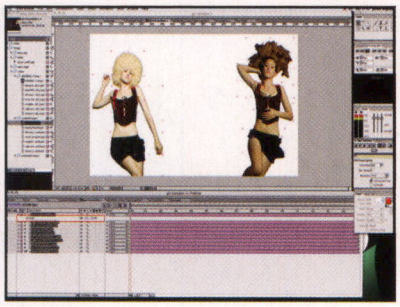
How to achieve the transition effect with one image transforming into another...

Camera tips

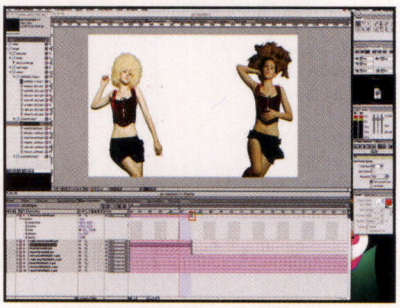
When in the camera view, pressing C will enable you to pan, rotate and dolly the camera so you can see what it's looking at, almost like a first-person shooter game. It comes in really handy when you're setting up your camera's path.



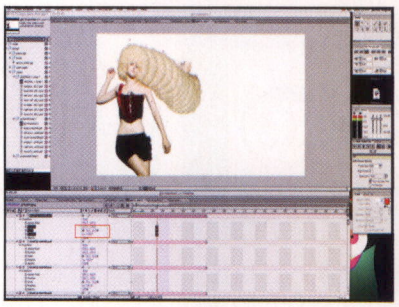
1 Import your *Photoshop* files in the same way as you did with the *Illustrator* file (don't forget to select Composition>Cropped Layers). Decide which image you'd like to turn into which, copy the layers from one and paste them in with the other and rename the composition 'girl transition 1' (Ctrl/Cmnd+k). Resize the composition to 1,024x576.



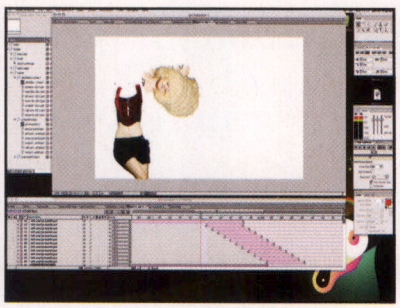
2 You now need to scale down the two girls, using the parenting technique for each girl separately (around 15 per cent is right). Place the two images at opposite ends of the frame, so there's plenty of room for the transition.



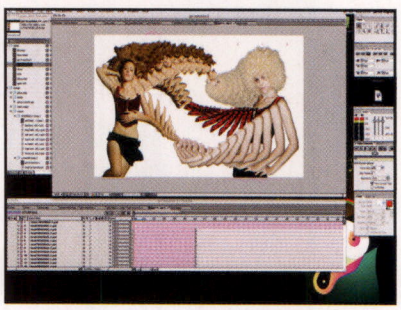
3 Let's start the transition. First, change the length of the layers to around six frames – this value is about right to get a nice stop animation effect. To do this, click the grey bit on the end of a layer and just drag.



4 Click whichever part of the figure you want to start animating and duplicate it. Play around with the rotation, scale and position, staggering them through the layers. For example, if you rotate a layer 15 degrees then the next layer should be 30 degrees, the layer after 45 degrees, and so on.



5 To make the parts look as if they're moving you'll need to stagger them a little as in the above screenshot. The shorter the step between the layers, the longer the trail effect will be. When you've finished, the timeline should look a bit like some stairs.



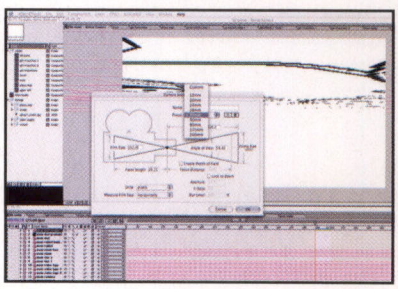
6 When you've completed the previous step for all the figure's body parts it should look something like the above (except not showing all at once). To make the animation good, it's important that the parts follow some kind of flow, like the shapes formed by the parts above.

Part 5: Bringing it all together

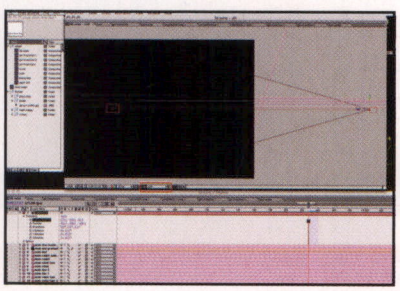
Combine the previously animated sections into one composition...

Working practices

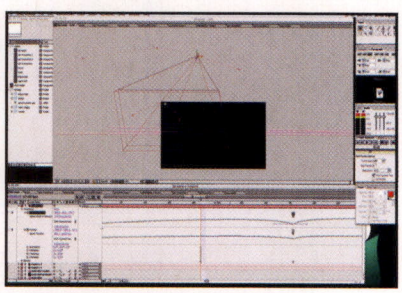
When you're working on a project, turn the quality right down. Video eats up memory and CPU, so turn off the anti-aliasing and put render quality down to a quarter. If you want to preview your work, press space (or keypad-0) and *After Effects* will do a render at whatever quality settings you currently have.



1 Having animated all the lines, various elements and other bits, it's time to put them all together. First, resize the composition (Ctrl/Cmnd+k) where you animated the vectors to 1,024x576 (Broadcast Standard Widescreen). Now add a camera to the scene (Layer>New>Camera), and select 35mm from the Preset box.

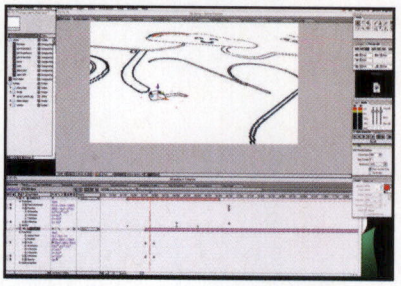


2 Click the wireframe mode (the envelope-like button) and select Left from the View menu. Now you can see your camera. The ball that sticks out from the camera represents the point of interest. This is the point from which the camera pivots, which is important when it comes to camera moves.

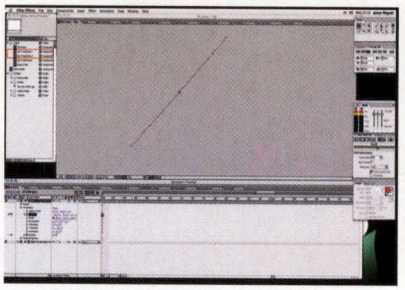


3 To make the camera move, click the keyframe button, move the camera and a keyframe is made. Once you've made a rough path you'll want to smooth it out, so click the View button and select an option (left, right or top), select the Pen tool (G) hold down Alt and click a keyframe on the path. Now you can drag out Bézier handles.

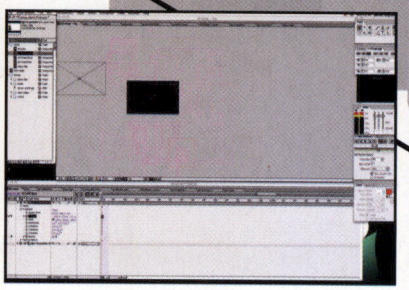
Bringing it all together continued...



4 After you've done your camera moves you need to sync the animated lines and elements so they happen in front of the camera. Go back to camera view and simply drag the layer across the timeline. You can look at the keyframes to help you see when a layer animates.



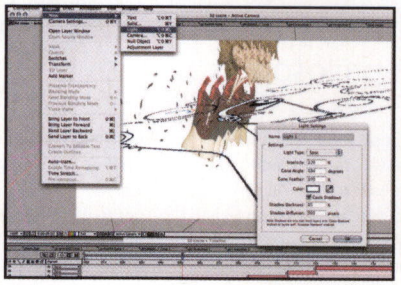
5 Now add in the girl transition animations. Simply click and drag either of the girl transition compositions onto the timeline.



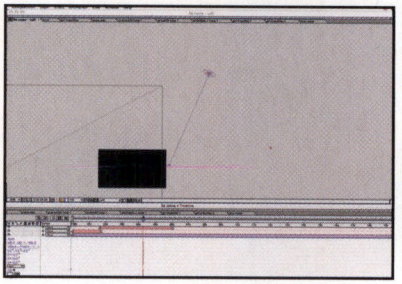
6 They're treated in exactly the same way as any other layer, so make them 3D and position them wherever you like within the scene.

Part 6: The finishing touches

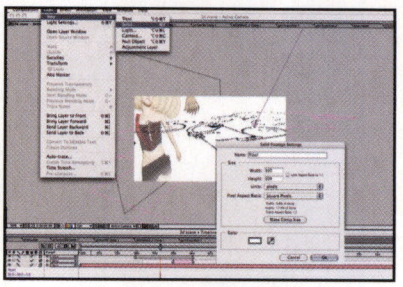
Add that extra something to get the finished product looking special...



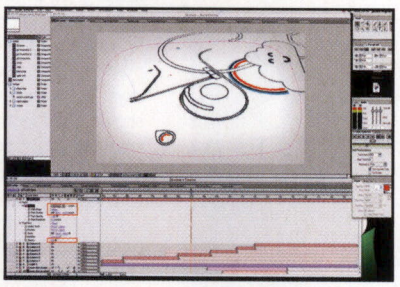
1 These touches are left until last because they really push up the render times, but they do add a nice quality to the overall look. First, we'll add a light into the scene (Layer>New>Light).



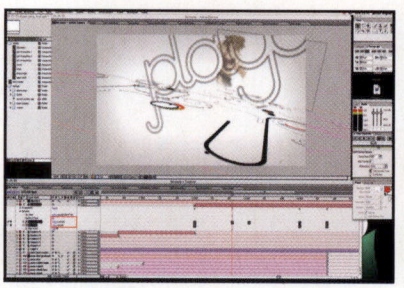
2 You can move the light around in the same way as you did with the camera. To get a nice shadow, position it slightly off centre.



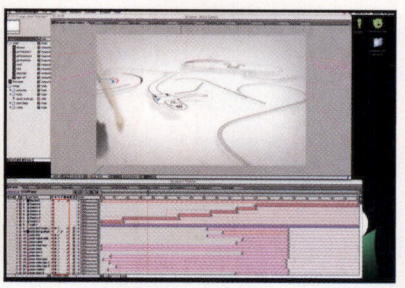
3 To get the shadow to show up, create a new white solid (Ctrl/Cmnd+y), click the 3D box and resize it so it covers all of the area where the design is. Once you've positioned it so it's under all the other layers, set the layer mode to Add, so that only the shadow will show and not the white. Make sure Accept Shadows is on and Accept Light is off.



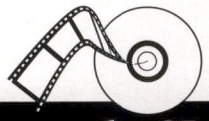
4 You can add a soft border around the composition so it isn't as bright. Make a new black solid, and use the Pen tool (G) to add a mask around it. Set the mask mode to Subtract, feather the mask 200 pixels and drop the Opacity down to around 20 per cent.



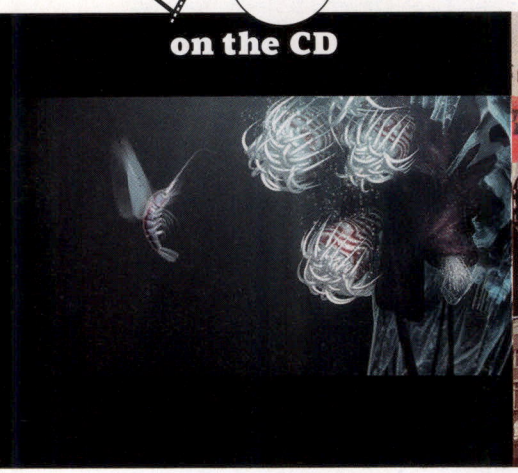
5 Adding depth of field to the cameras gives a really nice quality to the image. To do this, click the triangle on a camera layer to reveal the option. Enable depth of field and play around with the focal distance and aperture to focus the camera. Prepare for some long render times too.

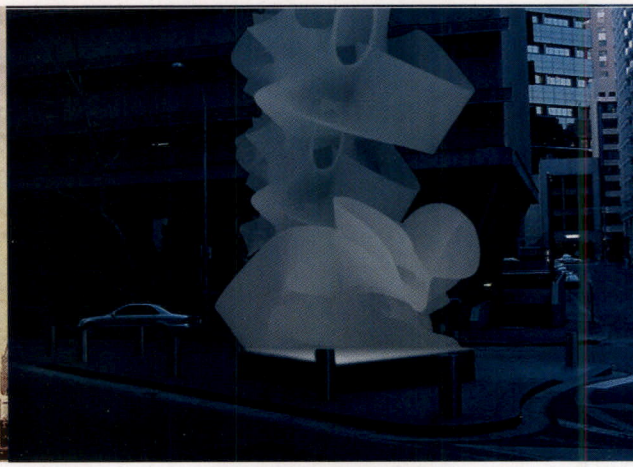


6 Just before you hit the Render button, make sure the 'anti-aliasing' (the small diagonal line), 'motion blur' (the M icon) and the 'continually rasterise' (black star) options are checked. The 'continually rasterise' option is only needed on the layers imported from *Illustrator*. ca-p



on the CD





Profile

[w] www.umeric.com

Umeric

"It's a hell of a lot of fun and it can be a bit hectic, but we're hungry for more." Ash Bolland outlines the Umeric philosophy…

Back in September 2001 two Kiwi designers decided to set up their own studio, Ash Bolland concentrating on moving image and Von Dekker handling the static. "Four years later we're still jamming," says Ash. "We've never worked harder or longer hours in our lives, but we don't regret the decision for a minute"

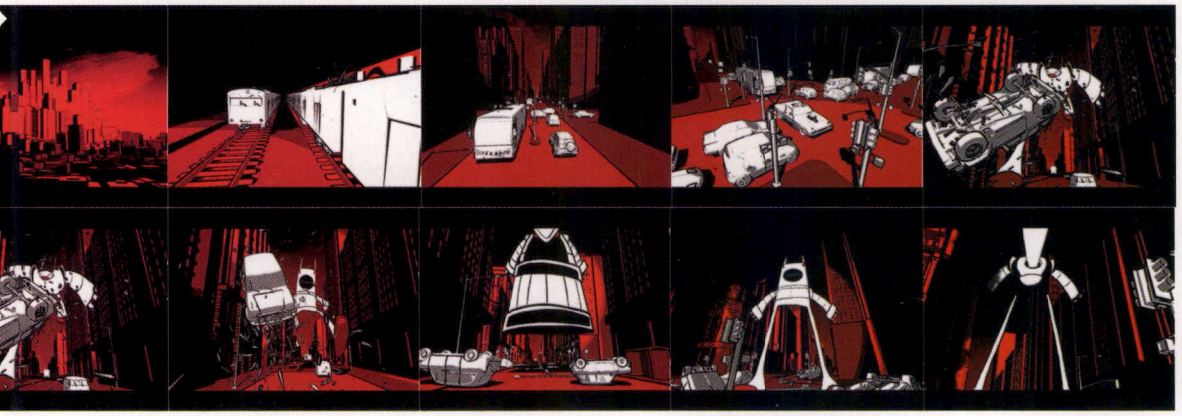
Nor should they. With work for Xbox, MTV and Australia's SBS Television under their belts there's plenty to shout about. And that kind of exuberant gesture is not unlikely: "I think our biggest influence is having grown up in New Zealand," says Ash. Further narrowing this down we get to "the 'can do' Kiwi attitude." The pair's heritage is not to be underestimated.

Umeric aims to produce work which is precision guided in its purpose. The name 'Umeric' explains the intention: "It's a play on the word Generic," explains Ash. Determined that the studio would be anything but, he came up with the inverse: "Umeric... to me it means 'made for you' or 'I made this for you'."

Being different

For Ash it's important to keep moving forward, to keep inventing. "With every piece we try to do something different," he says, "to learn something new." That's how it should be. If motion graphics is about anything, it's about breaking new ground. It's a naturally acquisitive field, the magpie of design.

This talk of invention has its implications. For one, it's easier to believe him when Ash volunteers that, "We don't really have a 'house style'." Instead, Umeric prefers a "house of strong ideas." Pulling together influences and approaches, the studio is "a constantly evolving entity, exploring new forms and styles." The thing that unifies those forms is motion.



It's refreshing to hear anyone professing something other than the standard mantra of specialisation resulting from the spiralling complexity of most graphics packages. "In essence, we believe that this is where our talent lies..." says Ash, "in adaptation and experimentation." Umeric is like an adventurous outdoorsy type of designer.

Synergy

Having worked together for more than a decade, Von and Ash have built up an understanding which amplifies their talents. "We complement each other's styles," explains Ash, but more importantly, "We both know when a completed piece feels right." Design teams stand or fall by the strength of this signal and Umeric has it finely tuned.

Still, it's no easy ride: "We work very hard for this and sometimes it takes all-night jams to nail it," says Ash. But nail it they do, repeatedly. You can see, even from a casual viewing of Umeric's work, that thought has gone into every single frame: their visuals have a leanness that makes them exciting.

"We rely on each other's opinions," admits Ash. Without the back and forth the paring away of unneeded visual flab would become impossible: "Having a fresh pair of eyes to call on 24/7 and say 'Hey, what do you think about this?'" It's all made worthwhile when the dream job comes along "and it all falls into place in a few hours." Expressing a kind of relief peculiar to creative professionals Ash sighs, "It's so nice when that happens!"

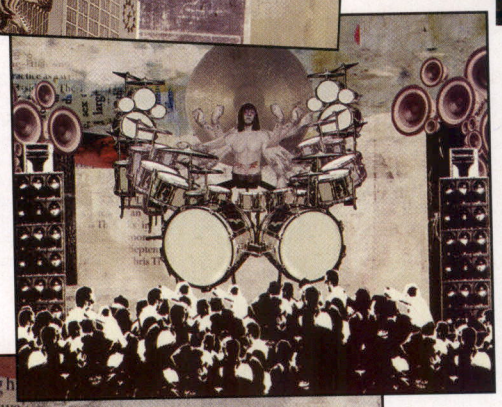
Kiwi style

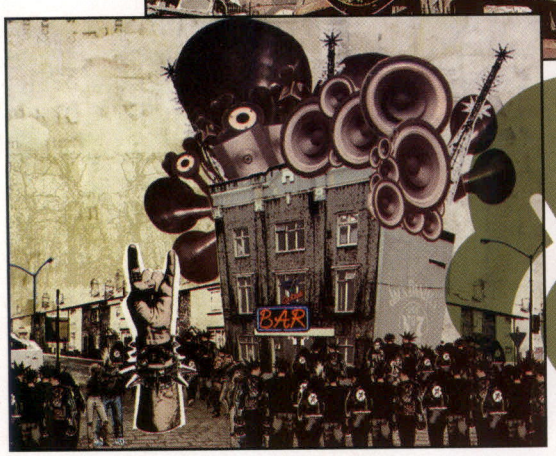
"Our projects jump around a lot in mood, tone and colour," explains Ash. There's a simple explanation for this: "We're both

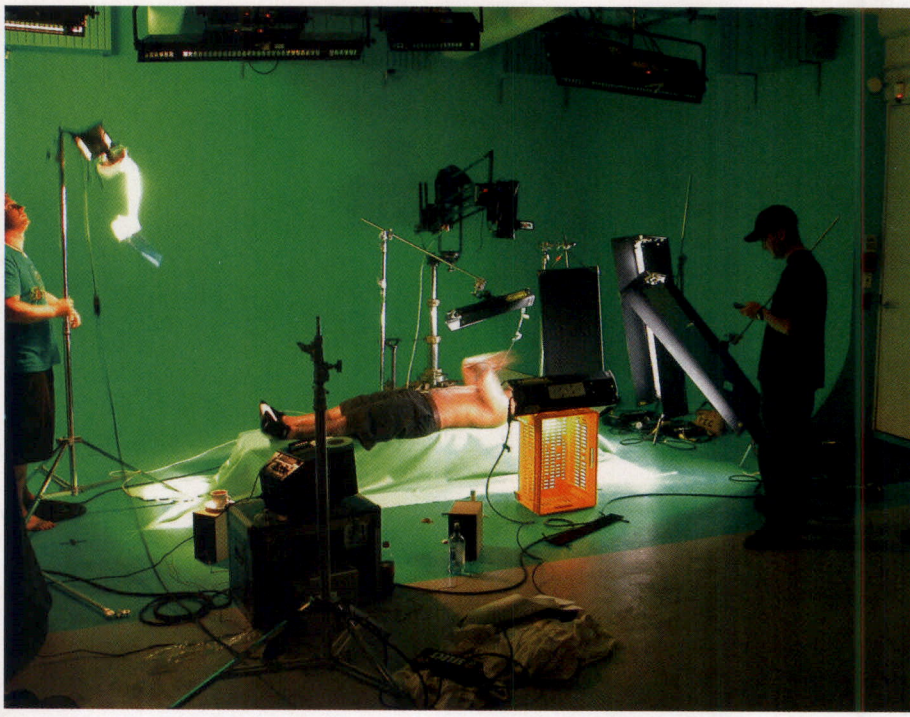
Above: After ten years of working together, Umeric's Ash Bolland and Von Dekker have built up a special relationship which enables them to produce work with great variation in style while maintaining a uniformly high standard. "We don't really have a 'house style'," explains Ash, "but rather, we attempt to have a 'house of strong ideas'."

Left and far left: Still images created for an exhibition for YEN Media International, showcasing female graphic design and illustration.

Far left, bottom: Umeric's awesome music video for Salmonella Dub's *Nu Steppa*, in which four monsters totally destroy a CG city.







Images from the animated Show Package for the 2004 Jack Awards, for the best in Australian rock.

from New Zealand." It is a bit more complicated than that: "The New Zealand landscape is quite amazing. It's incredible how dramatically the scenery can change in such a small country." But not that far removed, it's art imitating life, "You can see those influences in our work."

"We enjoy creating projects with a strong, simple concept," adds Ash. These range from moody and dark to fun and cute, but they are always something more than just surface. They're also very detailed, "so people can spend some time with them."

"Above all, we try to make sure our work comes across as honest and loved," says Ash. It's an admirable goal and one that readily translates into deeply engaging work. "We enjoy getting our hands dirty with projects," both designers regularly getting away from the computer to build sets and shoot at various locations. The idea is that you get out what you put in. "As we love the work, so we get to jam on," concludes Ash in a particularly outdoorsy moment.

Emotion engine

Given the proclivity for dirty hands and landscape, the following comment shouldn't come as too much of a surprise: "I love motion!" It's why Ash is in charge of the moving-image division of Umeric: "I love how it's about conveying an idea in the most upfront and interesting way possible, without the need to tag extra information to it." It sounds like Umeric is kayaking down the rapids of life, with one hand on a mouse, the other holding a DV camera. "It's the closest thing to making the visions in your head become a reality," says Ash, doing nothing to dispel the image. "It's a hell of a lot of fun trying to get ideas across in a few seconds."

Ash lists his pleasures: "Manufacturing objects and characters that come alive in an environment you've created." We can all relate to that one. "Deciding how realistic or artificial this world is by controlling how fast or slow time passes." That's a poetic observation. "And making your character destroy a ten-storey building or whatever you can think of... it rocks!!" Yes, it does.

Future perfect

"We have a strong desire to be independent," admits Ash. Like many designers, Umeric is keen to become its own best client. "We want to start producing our own products," says Ash. And this is starting to come together: "I am currently in pre-production for a film and we have a few other self-initiated projects planned for later in the year."

He's realistic, though, adding: "We'll see how it goes" and "I'll let you know." If they keep producing work of such a high standard then it'll be surprising if the world at large lets them get away with doing their own thing. Ash has a partial solution to this: "We use that saying from *Star Wars*: 'Keep on target', 'Keep on target'." Let's hope the force is strong enough. ca-p

Left: "It can be a lot of fun developing ideas, be it via 3D, 2D, or live action," says Ash. "We enjoy getting our hands 'dirty' with projects, getting away from the computer to build sets and shoot at various locations." These shots from the video for *Long White Cloud* by New Zealand's D&B-meisters Shapeshifter prove the point.

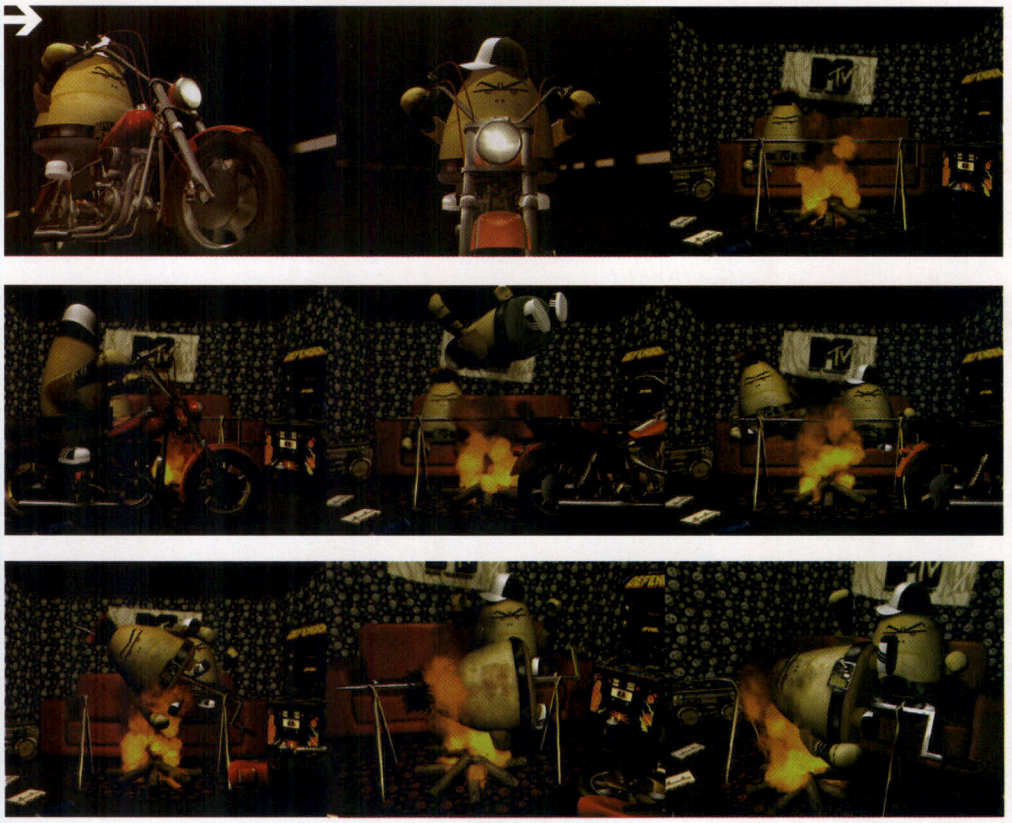
The 3D problem

"I'm not aiming to be photo-realistic. I'm trying to capture the human touch: not perfect, not calculated," explains Ash.

As its possibilities have continued to grow, 3D has become the driving force in a lot of the best design and Umeric is no exception. Ash sums it up nicely: "We use 3D in most of our motion projects because it allows so much freedom to move." A whole other dimension in fact.

But 3D has a tendency to lean work towards the technical, "I do sometimes have trouble balancing the technical aspect of 3D and the creative," admits Ash. "There's so much to learn and sometimes I'm just not sure what area to attack and keep up with next."

This is the dilemma of the kid in a sweet shop though. "I love it, it reminds me a lot of skateboarding: you have to enjoy the buzz of learning new tricks everyday." For those of us that never mastered tic-tacking across the car park, this is little consolation. "It hurts to learn, but it's so rewarding."



Right: Umeric animated these two potato-headed rock objects for MTV Australia's Thursday Night programming.

Feature

DVD menus

Four motion graphics specialists show us what's on their menus...

[illustration] www.viagrafik.com

Although often overlooked by many skipping to the main feature of a DVD, the motion menus play an intrinsic role in how we relate to a title and are central to the way in which we navigate around extra features, commentary tracks and trailers. The design and creation of these menus is a complex process which can take months to achieve, and the more ambitious they are in scope, the more the companies that create the graphics, animations and other elements have to put in.

case study 1

Abbey Road Interactive Concert for George

Award-winning Abbey Road Interactive's recent *Concert for George* saw the design group entirely rebuild the iconic Royal Albert Hall...

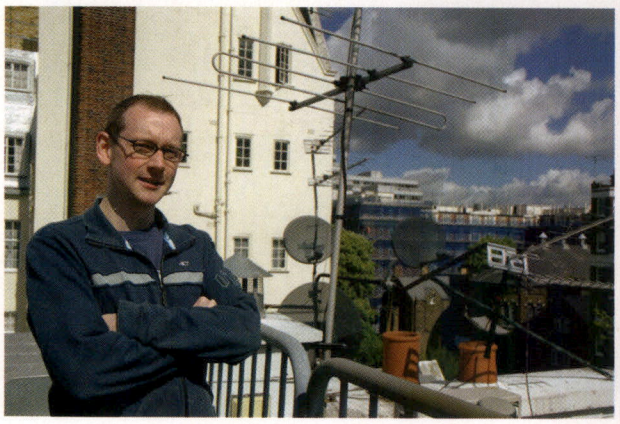
Based in what could easily be described as the most famous recording studio in the world, it's little surprise that the EMI-owned Abbey Road Interactive has a long and successful pedigree as a leading developer of music-based DVDs.

With a portfolio ranging from the *Coldplay Live* concert film and a greatest hits package for current rap flavour of the month 50 Cent, to massive projects such as the six-disk *Beatles Anthology* overview, Abbey Road Interactive is at the forefront of menu design – something that has been recognised by a number of industry awards.

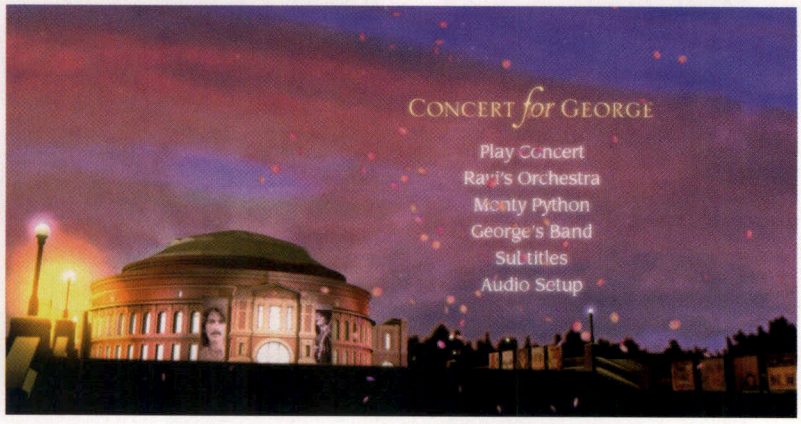
The company's most recent project, *Concert for George*, was no exception, scooping the Best Long Form Music Video award at the 2005 Grammys. For this special commemoration film – a project obviously very close to the hearts of the staff at Abbey Road – the group was asked to design the main interface around the famous Albert Hall venue where the concert was staged.

Chief Designer Mark Warner says the company's main method of working is to start with a client meeting and then design a basic flowchart of content, music and structure.

"This will then be taken away by the designer and worked into a visual



Below: Chief Designer Mark Warner.



Below right: The external daytime and night-time 3D model shots of the Albert Hall were created in *LightWave*.

storyboard, showing how the disc will look, animate and function," says Mark. "After discussing the storyboard with the client, any changes are made and the menu production process begins."

The next step, which involves creating the menus we see in the finished product, is a little trickier. "After initial designs in *Photoshop*, the elements of the disc will be composited together in *After Effects*, adding motion effects and filters. These are then rendered out into bitmap sequence files and audio files for encoding into moving menus and transitions. A build is then made of the DVD and is checked for functionality and any changes needed are made at this point or after a client has seen the emulation," says Mark.

How many holes it takes to fill the Albert Hall

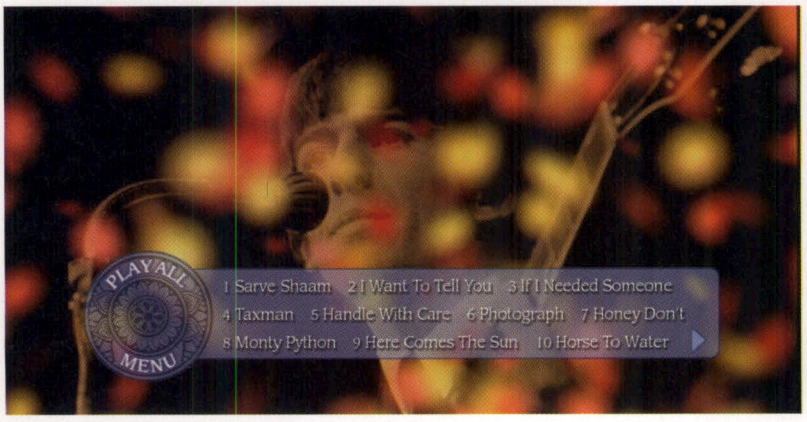
For the *Concert for George* DVD, Abbey Road Interactive developed menus designed around various parts of the Albert Hall itself, inviting viewers to access the concert through various entrances of the venue.

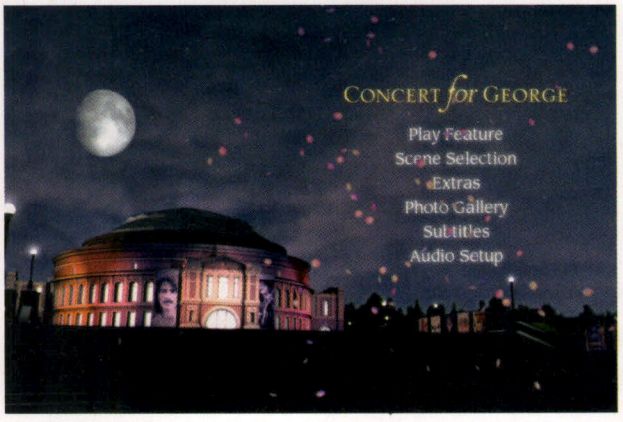
At first, ARI wanted to go build the menus using photo-realism and Photoshopped images of the hall. Once the scale of the project and budgetary constraints came into play, this plan was shelved, in favour of recreating the venue in *LightWave*.

"A basic wireframe model was made and camera paths plotted to ensure that each shot left room for the text options to be overlaid," says Mark Warner. "We then rendered a basic animatic, and once this was approved by the client, we continued to add lighting and textures. This rendered movie was then brought into *After Effects*, where the text layers from *Photoshop* and *Illustrator* were added, together with a loop of stock footage for the sky and a silhouette of the London skyline for context."

Below: The George Harrison memorial concert DVD won Abbey Road Interactive a Grammy award for Best Long Form Music Video.

Below left: The Royal Albert Hall is used by the Abbey Road team as the main theme to link all the parts of the *Concert for George* DVD together.


PLAY ALL
MENU
1 Sarve Shaam 2 I Want To Tell You 3 If I Needed Someone
4 Taxman 5 Handle With Care 6 Photograph 7 Honey Don't
8 Monty Python 9 Here Comes The Sun 10 Horse To Water



case study 2

Vision Wise Star Wars Trivial Pursuit

Taking almost a year to complete, West Coast-based menu specialist Vision Wise's work on a *Star Wars* DVD version of the *Trivial Pursuit* game was certainly a tough challenge...

Working in the independent film, TV, animation and games sectors, Dallas-based Vision Wise has been steadily carving itself a niche in the competitive interactive design and motion menu space over the past few years for clients ranging from Picture This Entertainment to gay web community group PlanetOut.com.

The company has worked on a wide and varied number of projects but always starts a project from the same place, according to Lead Designer Jamie Cameron, by establishing the assets it has to work with and the amount of creative freedom the client is prepared to give. "Once that has been established," says Jamie, "we watch the content of the DVD, looking for subject matter, purpose, style, mood, main characters, and audience. With this information we brainstorm, either individually or as a group, then do rough sketches in *Photoshop*, and sometimes *After Effects*, of several looks for the client to choose from, including highlights, video effects, and compositing."

Once this has been completed, the creation of the actual menus begins, according to Jamie, by laying out designs in *Photoshop* and then adding captured video, stills and audio assets. "Separate *Photoshop* files are then set up for each menu for animation in *After Effects*," explains Jamie.

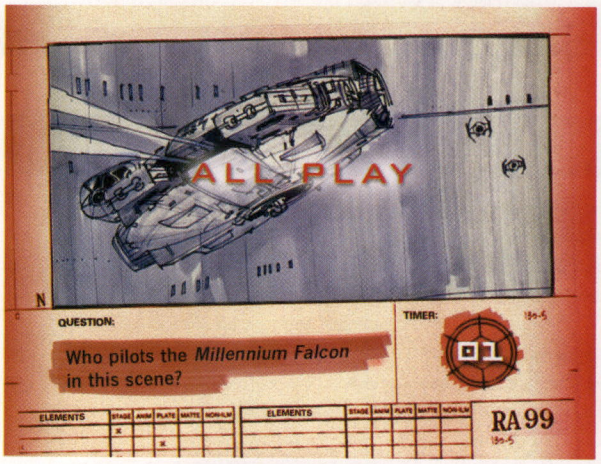
"Once this has happened we experiment with effects, layering, compositing and animation to come up with the final motion of the menus," continues James. "Length of menu music usually determines the length of our menu loops. At this point we'll also design and animate any transitions that are needed. Once we have a look we're happy with, we set up and animate all of the menus. We usually plan on several rounds of approval to make sure the client is happy with the flow of the work."

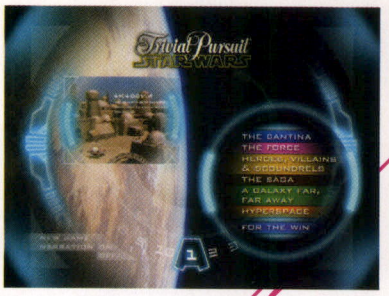
Below, clockwise from left: The *Star Wars Trivial Pursuit* DVD project involved Vision Wise supplying two main menus, 22 game menus and 600 puzzles.

Vision Wise spent a lot of time watching *Star Wars* before starting to develop menus and content.

The Vision Wise development team was provided with a wide range of assets for the project including 3D models and layered *Photoshop* files.

TRIVIAL PURSUIT® is owned by Horn Abbot Ltd. and sold under exclusive license to Hasbro, Inc. ©1994, 2005 Horn Abbot Ltd. All Rights Reserved. ©2005 Lucasfilm Ltd. All Rights Reserved.©Hasbro. All Rights Reserved.





May the trivia be with you

For a special *Star Wars Saga Edition* DVD version of Hasbro and Parker Brother's perennially popular *Trivial Pursuit* game, Vision Wise certainly put the hours in, assigning a team of three animators for a period of 11 months to develop and complete the project.

While this may seem like a long time, the task itself – designing two main menus, 22 game menus and 600 puzzles over two DVDs – was certainly labour intensive.

Vision Wise was provided with copies of the *Star Wars* films along with sound effects, music, 3D models and layered *Photoshop* files to form the basis of the menus. Working closely with graphic designers, the company developed effects, gameplay, DVD structure, 3D models, 3D effects, motion and transitions for the title.

"We made extensive use of *After Effects 6.5*'s new JavaScript capabilities in streamlining our set-up and rendering workflow," says Jamie Cameron. "For example, most puzzle styles had variable-length timers and sub-compositions; retiming these by hand would have been incredibly tedious for 600 questions," he says.

The Pavement Little Britain

case study 3

London-based The Pavement has handled everything from cult films and stand-up gigs to greatest hits packages and, one of 2004's best-selling comedy titles, *Little Britain*...

Representing the best of UK talent in the motion menu design business, London-based The Pavement is one of Europe's best known and award-winning DVD production houses, and it has quickly gained a reputation with clients in the film, music and television industries.

Founded in 2000 by Andy Evans, Kristen O'Sullivan and Lloyd Shaer, The Pavement has grown quickly through a number of high profile projects which have recently included a Scissor Sisters concert film, a Stone Roses compilation, a live film for comedian Jimmy Carr and popular UK cult cross-over movie *Shaun of the Dead*. The company has also recently produced motion menus for *Little Britain* – the runaway TV success of 2004 which has proved ridiculously popular on DVD.

Mike Sharpe, Pavement's Senior Designer, says the most important part of developing menus for projects such as *Little Britain* is to "sit down and watch."

"It's important to not try and come up with ideas quickly, because at this stage you should just mull it over," begins Mike. "It's often nice to get stuff early, watch it and leave it for a few days to marinate in the back burner. I spend a lot of time watching, listening, researching and surfing to really get inside a project before I jump into the computer and start designing."

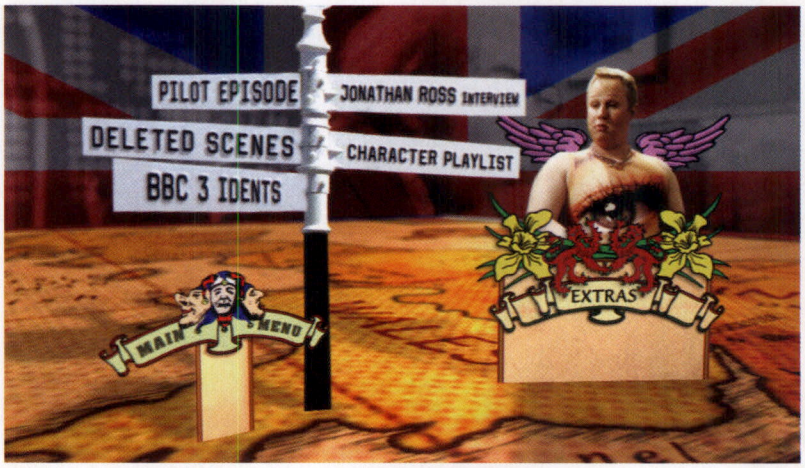
From the ideas stage, Mike says the next important step to take is thinking about how the navigation and style of the disc will work throughout.

"It's no use coming up with just a really nice main menu; you need to think how the main style can be adapted and furthered into the secondary menus and so on. Often it's a good idea to sketch down how you see the disc working in a rough flow chart and talk it through with the producer at all times," says Mike.

Below, clockwise from left: The Pavement believes the best way to get to the heart of a project such as *Little Britain* is to "sit down and watch" the content.

Little Britain menu designer Mike Sharpe says it's important to adopt the main menu style throughout the DVD.

After Effects, Photoshop and *Illustrator* are the mainstays for The Pavement, but plug-ins are avoided.



Under the bonnet

Like the other motion menu developers we spoke to for this feature, The Pavement favours a Mac and Adobe-heavy environment and draws on the same popular suites of creative software, namely *After Effects, Photoshop* and *Illustrator*. Senior Designer Mike Sharpe believes this suite of applications is "plenty powerful and creative enough to fulfil our design needs."

Mike also believes the basic Adobe packages work best on their own – a policy which has lead him to view whizz-bang plug-ins with suspicion.

"We use a very limited number of plug-ins because these can often give things a very generic look. Something I hate is to watch a piece of motion graphics and think 'oh, that's the Light Burst filter'," explains Mike.

"From time to time we need to create 3D elements and for this we use *3ds max*, and we have an Avid editing suite where we cut all our extra content," he concludes.

case study 4

Blink Digital Ghost in the Shell

From conception to storyboards to "lots of client meetings", veteran menu producer Erika Offutt and Blink Digital know all about developing projects for a range of clients, including the fast-moving world of anime...

Below, clockwise from left: Complex motion menus for anime film *Ghost in the Shell* have a mix of static and moving content.

Ghost in the Shell is one of a series of seven anime DVDs and one of many anime films Erika Offutt has been involved in.

Audio is usually added to menus after they are created, unless you need to cut footage to match music beats.

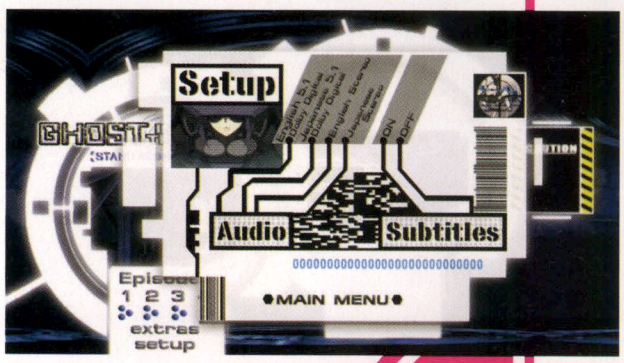
With a history in DVD motion menu design stretching back to the mid 90s, Erika Offutt has been involved in a wide number of projects mainly in the anime space. Now working for Santa Monica based Blink Digital – a well-established digital design agency with a wide range of clients – Offutt is working on a number of projects including one for MTV and the recently completed anime title *Ghost in the Shell*.

For Erika Offutt, the menu process begins with a client meeting, discussion and screening to give her an idea of the scope of the project. Once the preliminary discussions have taken place she can begin conceptualising, a process which usually involves Offutt presenting clients with storyboards of motion concepts or small *QuickTime* films of ideas.

Once the menu concepts have been developed and approved by the client, Erika begins the process of creating sub picture or highlight buttons – the areas on screen used to navigate through the DVD. At this stage she also adds audio tracks – although this may not always be the case. "For the most part, audio is put together with the menus after they are created but there are some instances where working with the audio while designing is beneficial. For example, when you'd like to cut video to match the beats of the music," she says.

The final stage of the process is encoding the motion menus and audio and sending them off to an author who will program them for functionality.

The working relationship Erika has with clients can vary greatly. "There are some I have developed a relationship with over the years who have come to trust my design instinct. Other clients like to be very hands-on and involved in the design process. This can mean many meetings, phone calls, and emails to toss ideas around," she says.



Getting into DVD motion menu design

The DVD industry is in a state of growth at the moment and there are lots of opportunities for people with the right experience and, more importantly, attitude.

"It's all about energy: you've got to really want to do it. It can be a lot of fun and hugely rewarding, but there's a lot of work involved to get to there," says The Pavement's Mike Sharpe. "When I started out I went to see everyone, not just people looking to hire. Find out and research the companies that you would love to work for and go for it. Put your face about, try and get in to see someone and get another name from them and so on."

"I would say seek out a company that you'd like to be part of. If that means starting at the bottom and working your way up, do it," advises Erika Offutt. "Anyone with the skills, ambition, and drive can and will succeed in what they set their mind to," she says. ca-p

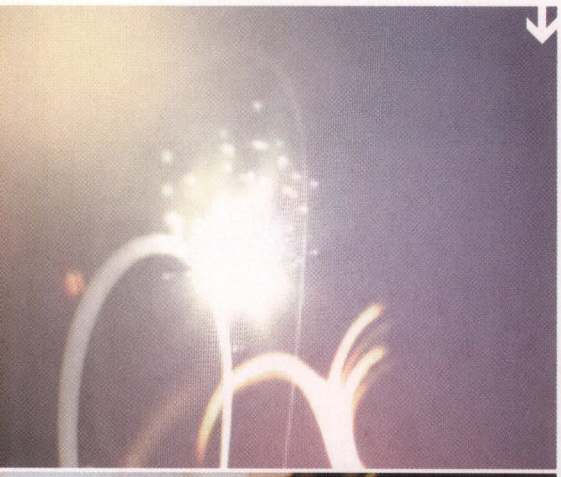
COMPUTER arts

Subscriptions
0870 837 4722

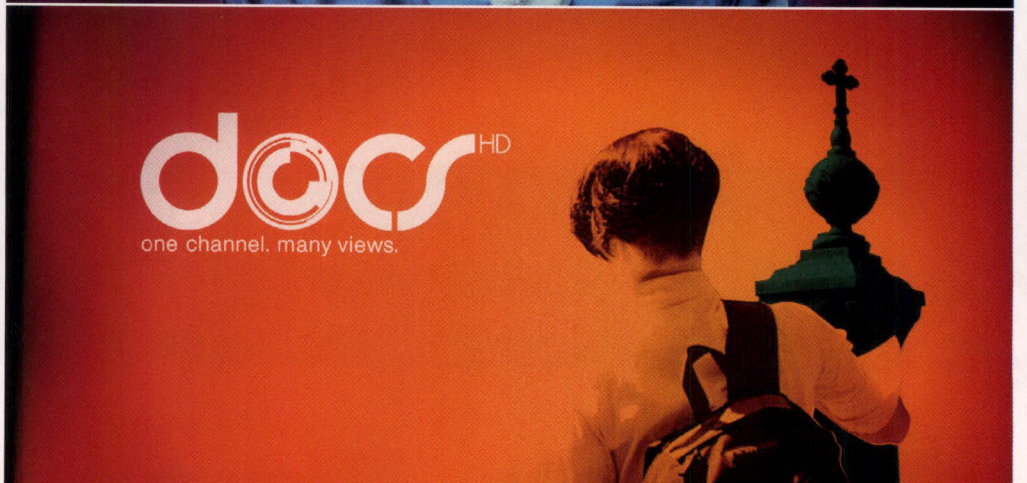
FREE BONUS DISC
Photoshop CS2 demo

JUNE ISSUE ON SALE **THURSDAY 12 MAY**

VISIT OUR BRAND NEW WEBSITE
www.computerarts.co.uk



lk
loyal/kaspar
showreel


docs HD
one channel. many views.

[w] www.loyalkaspar.com

Loyalkaspar

"We started Loyalkaspar with the intention of writing screenplays and the hope of making films." Co-founder Beat Baudenbacker reflects on how career paths sometimes take unexpected turns...

Had everything gone according to plan, New York based motion graphics supremos Loyalkaspar might currently be struggling to make a living penning scripts. "We never thought we'd have this much success in such a short period of time," says Co-founder and Director Beat Baudenbacker. "We thought we'd be writing screenplays and struggling and doing a bit of design on the side. It didn't really work out that way..."

The demand for the company's design work was hugely underestimated, and since founding Loyalkaspar two years ago, Beat and partner David Herbruck have created a commanding catalogue of motion graphics work for VH1, launched the EquatorHD and docsHD channels for the now defunct High Definition service VOOM, made movie titles, idents, show openers and logos.

Lofty beginnings

The pair's paths first crossed at brand communications group Attik in the late 90s. David joined as Senior Producer having worked at visual effects house Helium Productions in Hollywood and 3 Ring Circus in LA; Beat stepped up to the challenge in 1998 after graduating from Art Center College of Design in Pasadena, CA. Both were highly qualified in their design fields and with the added joint interest of wanting to write, they set up Loyalkaspar in 2003. Despite their experience and vision, they were outside their comfort zone. "We were in a couple of uncomfortable space situations before we got our own office," says Beat. And, "The decision to take on staff is a frightening one." Once these teething problems had been overcome, the graphics, rather than the words, began to flow.

Station masters

That graphics work, in the first instance, was for VH1. "We both had a relationship with the station before we started. VH1 is good about giving small companies a shot," says Beat. VH1's faith paid off: Loyalkaspar has gone on to produce an impressive variety of idents and promos for the channel, using its photographic, typographic, graphic design and, of course, motion graphics skills. "VH1 is an eclectic channel, calling for a different approach for every project," explains Beat. Loyalkaspar embraces this eclectic approach: "We try not to get known for a particular style. It is very easy to get 'pigeon-holed' and next thing you know, you'll be doing the same thing for the next couple of years." Beat is quick to add that the company's style isn't random or self-indulgent: "That doesn't mean that there isn't a sensibility and approach that makes us unique. But you have to allow for your graphical style to change as you develop as a person." For creativity to flow, style needs to be constantly developing.

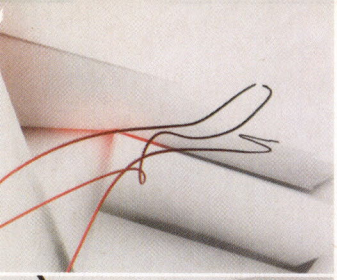
Inspiration for this evolving style can come from anywhere: "It's often hard to pinpoint what inspires you for a specific piece. A painting you saw last week, the logo of a deli you stopped by in the morning... New York is a very inspirational place for

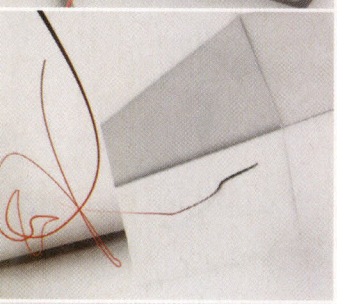
Opposite page, left: The Loyalkaspar showreel includes an eclectic mix of styles, beginning with a ten-second flower-blooming sequence which took more than a month to create. It was shot, layered, animated then shot again off the computer screen to give it a softer feel.

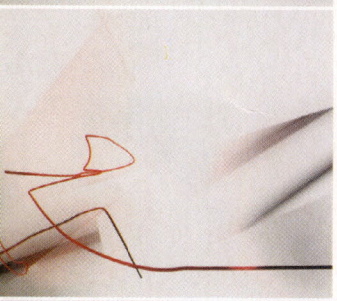
Opposite page, right: Stills from four of the ten idents created for the docsHD channel launch. These stunning montage sequences were created by Loyalkaspar from concept to completion.

Above: This temporary rebrand for the OLN channel was put together using *Illustrator, Photoshop, After Effects* and *Softimage XSI*.

Left: The men in charge.







that." When asked for more solid influences, Beat reels off his personal favourites: "I like print design, Swiss posters and typography, the Bauhaus School, the Black Mountain College experiments, David Carson, Joseph Müller-Brockmann, Peter Saville, Tomato."

Teamwork

With influences like these, it's no surprise that Beat's the designer of the partnership, David produces, and they both creative direct: "So we both individually do what we're best at and meet somewhere in the middle." This winning formula means that Loyalkaspar's clients normally give it the freedom to come up with its own concepts for projects, but, as Beat explains, "As the jobs get bigger, the stakes are higher and more people tend to get involved." You'd think this could be a case of too many cooks, but Beat is positive about such joint forces: "With more ideas floating around and more layers of opinions, the evolution and development of ideas and graphics get more collaborative."

A collaborative approach is important to David and Beat, and it's something they want to build on in future ventures. However, in terms of their creative team, the partners prefer to keep things under the one roof in their studio in the SoHo neighbourhood of New York. Animation work is done in house and freelancers are brought in to take care of illustrative projects. Photography and filming either take place in the studio or on location. "Whenever possible, we try to bring people into our studio so we have control over what happens in the process," begins Beat. "We have found that working remotely works well with very few people," although the company does operate successfully with trusted designers in Switzerland, but "rarely in England." Faithful freelancers from the other side of the pond could see this as a challenge...

Creatives enjoy going into Loyalkaspar's "low-stress" office: "We have a 'living room', a 'dining room' and a kitchen... We were trying to make it as comfortable as possible," explains Beat. It certainly looks homely with its inviting sofas, warm red brick walls and stylish furnishings. "Freelancers tell us that we have the best studio atmosphere in NYC. Whatever that means." It means we'd quite like to work there, or at least pop round for dinner.

Channelling skills

And this relaxed atmosphere obviously gets results. Loyalkaspar's work on the EquatorHD and docsHD channel launches was handled from concept to completion, and Beat and David found these projects to be their most challenging and exciting to date: "It allowed us to do everything from shooting live action, integrating photography and graphic design, as well as creating logos and dealing with typography." A look at these motion graphics pieces on the Loyalkaspar website will show how it succeeded in bringing all these aspects together to produce dazzlingly innovative pieces of work. "Plus it really allowed us to do what we think we do best: visual storytelling in all shapes or forms."

Talking of storytelling, whatever happened to the writing ambitions David and Beat were so intent on when they set up the company? "We just recently started writing again and hope to do more in the near future," enthuses Beat. "We have been thinking about making a short film for a while but haven't nailed down anything yet."

It remains to be seen whether Loyalkaspar will find the time to nail a film, especially as it's just started its own record label with friend and musician Tessa Perry. "We don't really know anything about the industry, but it goes with our approach of wanting to collaborate with great people, do things we believe in and take risks," explains Beat. And it's this enthusiastic, ambitious attitude that somehow makes you confident that the team will pull it off. It also means it'll be producing all the artist's promotional materials: "There are album covers and posters to design and music videos to make."

Beat's ambitions don't stop there: "I'd like to publish something in book form. A novel maybe. A children's book. Photography. We'll see where life takes us..." If the first two years of business are anything to go by, life will take Loyalkaspar down a long and ever-widening path. ca-p

Reality TV show opener

Much of Loyalkaspar's success has come from creating promos or show openers for American TV channels. This piece was produced for a reality show on VH1 in which one participant gets a song written for them by a celebrity musician. Beat explains how Loyalkaspar came up with this original concept:

"Because reality shows can vary quite a bit in terms of story line, it makes more sense to be a bit more abstract in terms of narrative." So the focus was on the act of bringing a piece of music to life: "A hand writes lyrics. The sheet music turns into the neck of a guitar, its strings propelling and guiding us through a three-dimensional 'Alice in Wonderland-like' space of musical notes. We end by sliding a 45rpm vinyl single into a sleeve cover."

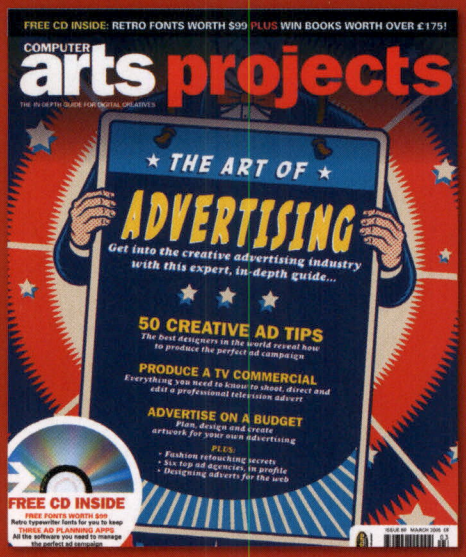
The project took three weeks to complete: two weeks for animation and one week for design, which was done in *Illustrator* and *Photoshop*. The hand was shot sequentially with a digital still camera and then rotoscoped and treated in *After Effects*. All the 2D animation was also created in *After Effects*, and the 3D work was done in *Softimage XSI* and composited in *After Effects*.

Beat concludes with a few words of advice for anyone thinking that the computer is a replacement for creativity: "The computer is only a tool (but a great one at that). Work on your skill to think sequentially. Look at Swiss typography. Keep your eyes open. Do everything with all your heart."

Right: The VH1 opener offers a lively take on the music creation process.

COMPUTER arts projects BACK ISSUES

ISSUE 69: CODE COSB0069


FREE CD INSIDE: RETRO FONTS WORTH $99 PLUS WIN BOOKS WORTH OVER £175!
COMPUTER arts projects
THE ART OF
ADVERTISING
Get into the creative advertising industry with this expert, in-depth guide...
50 CREATIVE AD TIPS
PRODUCE A TV COMMERCIAL
ADVERTISE ON A BUDGET
FREE CD INSIDE

ADVERTISING

Discover how to get into the creative advertising industry. Tutorials include: design advertising and promotional materials on a budget, create a high-quality broadcast-ready ad from DV footage, and produce eye-catching web ads. Plus expert advice from the creators of award-winning print and TV ads, including Passion Pictures, Channel 4 and Steve Seal. We also have 50 tips from top agency St Luke's and inspiring work from DDB London, Wieden+Kennedy, TBWA\, and more. **CD** Fonts worth $99, advertising planning software, *Fireworks* and *Dreamweaver MX* demos.

ISSUE 70: CODE COSB0070

EXCLUSIVE COMPETITION: WIN $500 AND GET YOUR T-SHIRT DESIGN PRINTED FOR FREE!
COMPUTER arts projects
THE INSIDER'S GUIDE TO...
ILLUSTRATION
Everything you need to create stunning artwork
PRO SECRETS REVEALED!
40 TOP TOOL TECHNIQUES
TRIPLE YOUR CLIENT LIST
One sure-fire way to get more work
CELEBRITY PORTRAITS
Master the art of drawing faces
PLUS
• Illustrate to a brief
• Lifelike drawing in Flash
• Animation tips and tricks
• Children's book illustration
• In profile: TheBrainbox, Beat13 and Fat Truckers Union
FREE CD INSIDE
STOCK ILLUSTRATION WORTH $3582!

ILLUSTRATION

We bring you everything you need to know to create stunning artwork. This month's tutorials include: T-shirt design from Threadless.com; photorealism in *Flash*; animating your illustrations in *After Effects*; working to a brief: celebrity caricatures; designing for kids. Also, meet leading illustrators including Beat13, TheBrainbox and Fat Truckers Union. Plus, read our in-depth features on the pros and cons of getting an agent, top tool techniques and more. **CD** Stock illustration worth $3,582, *Illustrator* and *FreeHand* plug-ins, plus *FreeHand* video training.

ISSUE 71: CODE COSB0071

EXCLUSIVE COMPETITION: WIN A TOP-OF-THE-RANGE HP A1 DESIGNJET PRINTER WORTH £12
COMPUTER arts projects
EVERYTHING YOU NEED TO BECOME A...
FREELANCE DESIGNER!
• Win big-name clients
• Build a top online portfolio
• Nail your first showreel
• Design business stationery
• Unravel tax and copyright
PLUS
TOP FREELANCER SECRETS
40 SELF-PROMOTION TIPS
FREE CD INSIDE
PROTECT YOUR WORK!

FREELANCE DESIGNER

Find out how to become a freelance designer. We bring you tutorials on creating your own stationery, stickers and desktop promotional items, plus how to design your own portfolio website and HTML newsletter. Meet the best of the current crop of freelance designers and illustrators, get self-promotion tips from Identikal and plenty of advice from other successful freelancers. Also learn all about tax and copyright and find out exactly what clients want from their freelancers. **CD** *iWatermark* full software, *OpenOffice.org*, and demos of *iBiz*, *Curio* and more. Plus 20 royalty-free images.

CALL THE HOTLINE ON: +44 (0) 870 837 4773 or TAKE OUT A SUBSCRIPTION – SEE PAGE 70

COMPUTER arts

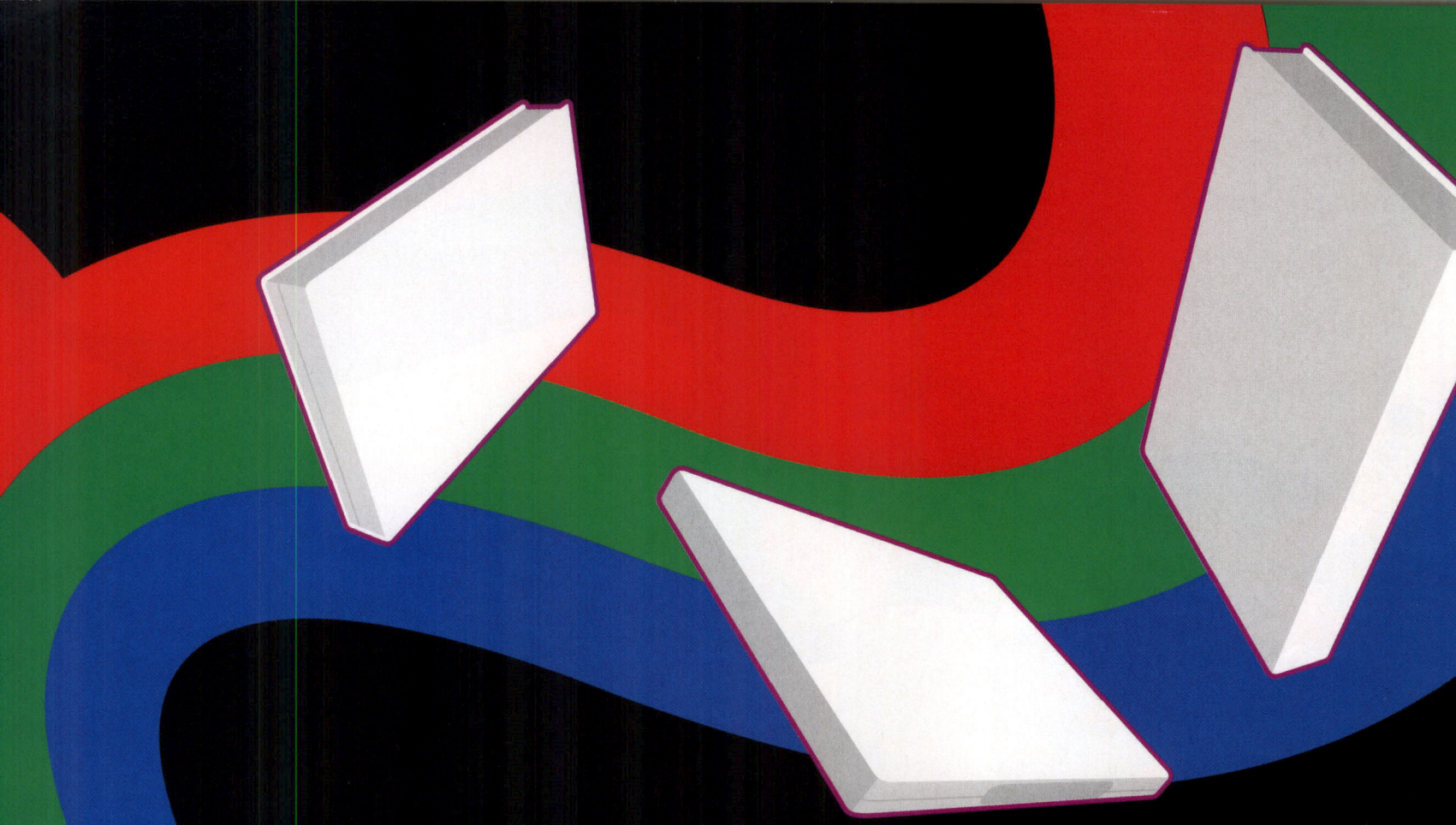
COMPUTER ARTS, THE WORLD'S BEST-SELLING MAGAZINE FOR DIGITAL ARTISTS AND DESIGNERS, IS THE ONE-STOP SHOP FOR PROFESSIONAL ADVICE ON CREATING DIGITAL ART AND ILLUSTRATION.

ISSUE 108: CODE COB00108
Photoshop lighting tricks, book cover art, Mesh tool secrets, *After Effects* animation, and the latest reviews.

ISSUE 109: CODE COB00109
Create a pixel-perfect landscape, transform dull photos, create neon effects, and sell your work online.

ISSUE 110: CODE COB00110
All *Creative Suite 2* apps reviewed, get dynamic with *Cinema 4D* and *Photoshop*, check out the Moby Hotel microsite.

All back issues cost £6. Postage free in UK. Add £1 per issue for European orders. Add £3 per issue for the rest of the world.



Feature

[illustration] Rinzen [w] www.rinzen.com

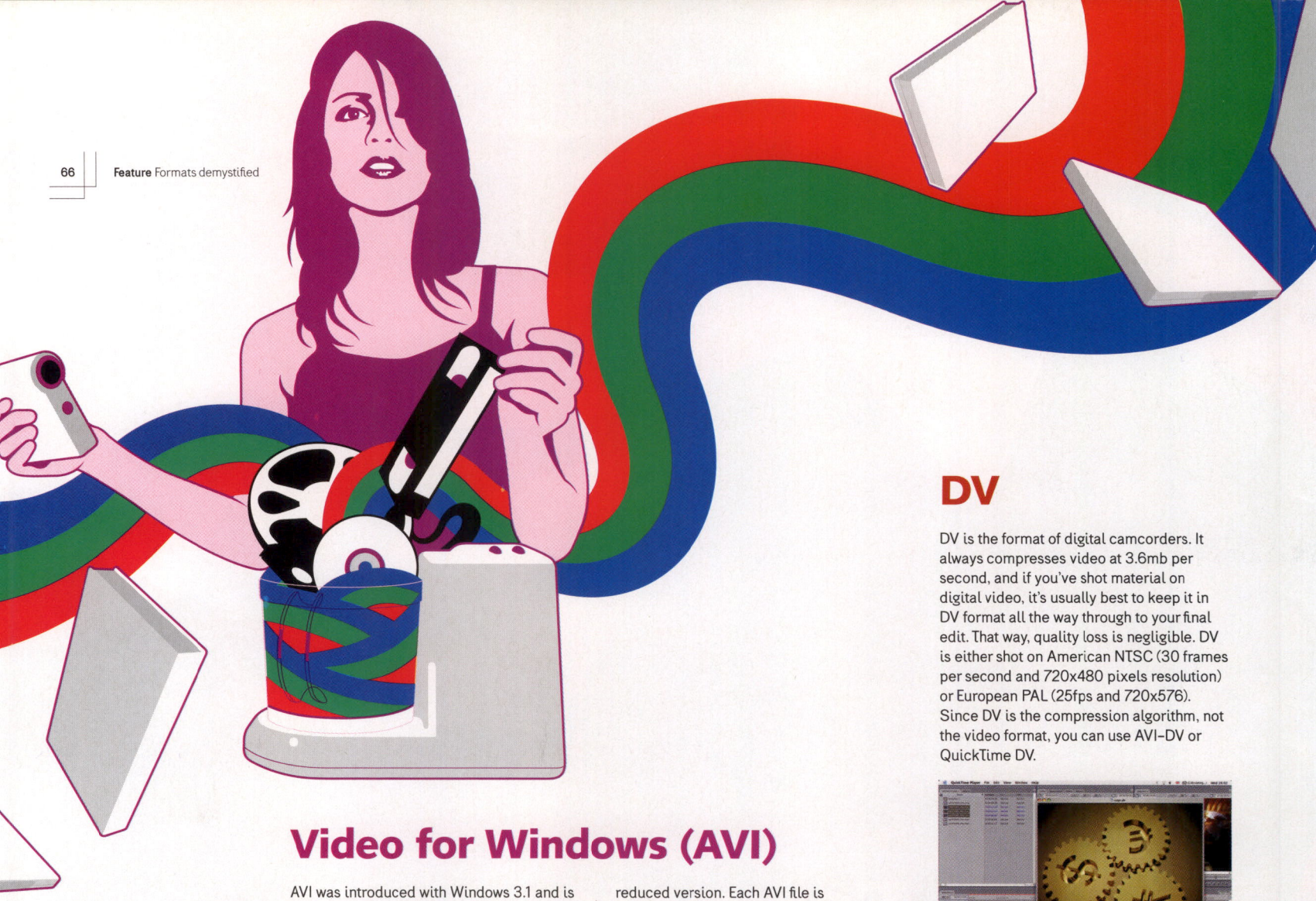
Formats demystified

There are many different formats for working with video. We explain what does what...

Digital video formats can be confusing. There seems to be a massive range of file types from AVI to QuickTime to Realmedia, and even within these, different settings and compression codecs abound.

Some formats will play on any computer right from the moment you install an operating system; others need you to download a new audio or video codec or even a specialist player. You can drag some onto the timeline of any video-editing package, while others are locked or coded in such a way that they can't be edited at all.

Over the following pages, we present a breakdown of the main video formats and what their primary uses and drawbacks are.



DV

DV is the format of digital camcorders. It always compresses video at 3.6mb per second, and if you've shot material on digital video, it's usually best to keep it in DV format all the way through to your final edit. That way, quality loss is negligible. DV is either shot on American NTSC (30 frames per second and 720x480 pixels resolution) or European PAL (25fps and 720x576). Since DV is the compression algorithm, not the video format, you can use AVI-DV or QuickTime DV.

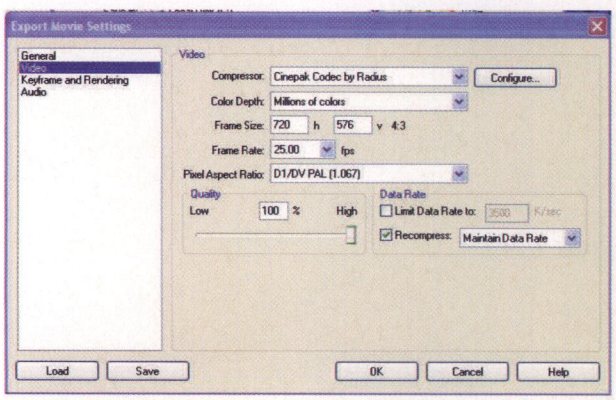
Above: DV is the format you'll use for editing your DV camcorder material.

Below: Digital camcorders record video in DV format. It's higher quality than DVD, but it takes up a lot of disk space.

Video for Windows (AVI)

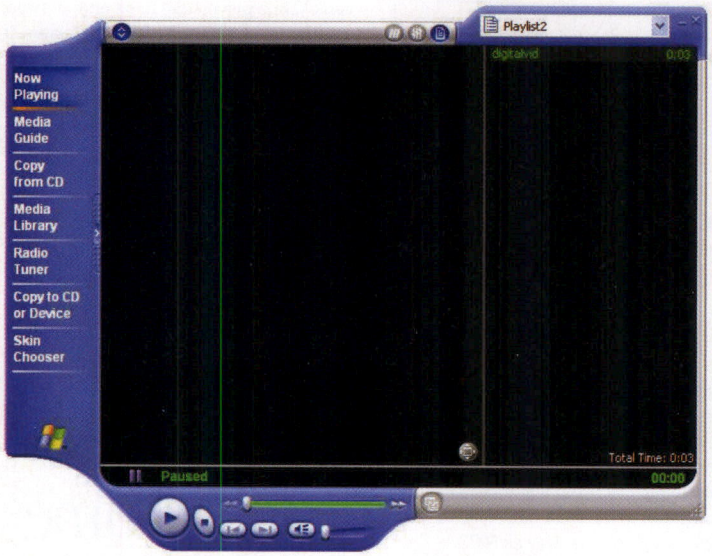
AVI was introduced with Windows 3.1 and is established and commonly used for all kinds of video work. When you install Windows, a media player is automatically installed on your system to enable you to play AVIs, and although Microsoft has just lost a court case and been forced to produce copies of Windows that don't contain the media player, this will have no effect whatsoever – the company will sell the operating system with and without the player at the same cost and nobody with an ounce of sense will buy the reduced version. Each AVI file is compressed using one of dozens of compression codecs, and you need to have downloaded and installed the right codec to play or edit the file. Windows Media Player has a system for automatically finding and downloading the right codec if it locates a file it can't play, but this sometimes fails, and you have to go looking for it yourself. That said, most people making video clips in AVI format use one of the pre-installed codecs (usually Cinepak, or Intel Indeo).

Below: Adobe *Premiere's* dialog box for exporting to video for Windows.



Windows Media file (WMV)

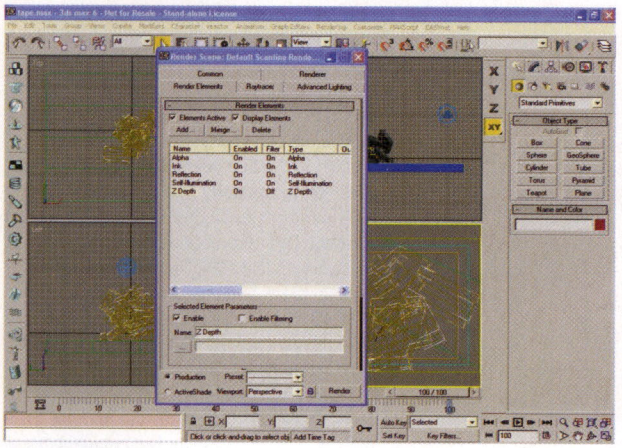
Windows Media is a bit of a jack of all trades. You can create low-bandwidth streaming video for the internet, or you can encode, edit and play high definition TV resolution videos with it. Lots of people use it, but not many use it exclusively and it doesn't really dominate the field in any specific area.



Microsoft's media player is installed with every copy of Windows, and this is likely to remain the case even after a recent court decision against the company.

Image sequences

Not much use for whole video sequences, but commonly used in effects work or animation, image sequences don't store audio but simply save each frame of the clip as a numbered picture file. There's no video compression used, but you can edit your clip frame-by-frame in a package such as *Photoshop*, and you can store extra information in the picture – such as transparency information, 3D depth, or speed of movement for each pixel in the shot – and this information can be accessed and used by effects packages.



3D animations are often rendered as numbered image sequences rather than videos. Here, we've added extra information to the render, which you couldn't add to a video file.

HD explained

Our domestic TVs, videos and DVD players are built for PAL (720x576) or NTSC (720x480) resolution video. High definition video is what equipment manufacturers and broadcasters would like us to move up to next. It offers 720p (1,280x720) or 1,080p (1,920x1,080) resolution. Right now, lots of broadcasters are gearing up by shooting and editing programmes and films on HD equipment, but although you can get domestic HD camcorders in the UK (Sony's HDR FX1 at about £2,500) you'll need a HD TV to play the results and, right now, nothing's being transmitted or marketed in that format (although Sky is gearing up for it).

Editing is slightly easier (although it's very memory/processor/hard disk intensive). You can play, and edit HD footage now... if you can find anyone who can watch it.

Far right: High definition isn't being transmitted in the UK right now, but you can download clips to play if you've got a high enough spec computer.

Right: The Sony HDR FX1 is one of the first high definition camcorders on the market.

MPEG

One of the most common video compression systems, MPEG files are usually denoted '.mpg', '.mp3', '.mp4', and so on. However, MPEG compression codecs can be used to create AVI, WMF or MOV files too. You don't have to worry too much about this, except to note that MPEG seems to be taking over the video world. There are several flavours:

MPEG 1 – 352x240 pixels at 30 frames per second giving compression of near VHS quality video. It's largely been superseded now by MPEG 4, but it's still used to compress video clips recorded by many stills cameras.

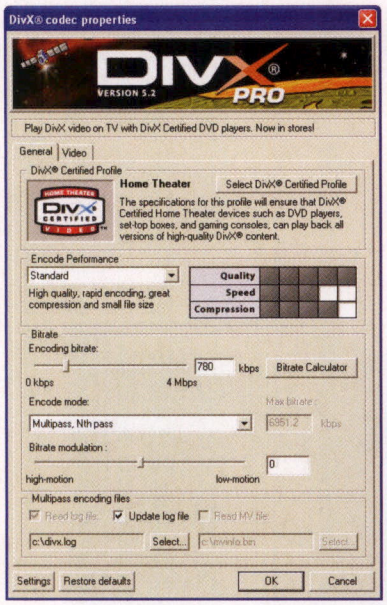
MPEG 2 – Up to 1,280x720 at 60 fps, this is the format used on DVDs. If you rip a DVD, you'll find the files named as VOB files, but these are essentially MPEG compression. It's also worth a note here that it's possible to produce DVD playable discs using a traditional CD-ROM. The quality is, of course, lower because a CD only stores 700MB of data as opposed to a (single sided) DVD's 4.7GB. However, most editing packages will enable you to write VCD (roughly VHS quality) or SVCD (roughly SVHS quality) CDs, which can then be played in most domestic DVD players. It's a good solution for short productions or those where quality isn't paramount.

MPEG 3 – Better known as MP3, this has become the compression method of choice for high-quality audio. It's been credited with revolutionising the music business by enabling songs to be compressed tightly enough to make swapping them over the internet (and storing them on handheld chip and disk devices) a viable possibility.

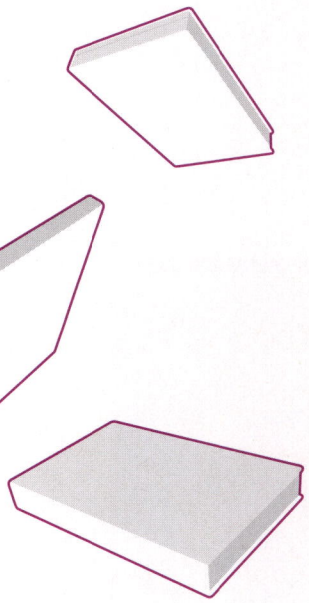
MPEG 4/DivX – MPEG 4 is the latest MPEG format and it's been described as MP3 for video, offering the ability to store a near full-quality version of an entire feature film in about 700MB (the size of a CD-ROM). DivX is the most commonly used practical implementation of it. It offers a range of compressions from streaming internet quality right up to DV. DivX has come to the forefront in the same way as MP3 – through its popularity with people sharing videos online.

The popularity of DivX means that there are a lot of companies out there trying to sell DivX players. However, you should be able to download an installer for free, which will enable you to play the files with the standard Windows media player.

MPEG 7 – MPEG 7 is still under development and isn't actually for video compression. It's got more to do with indexing what's in a video and enabling you to search its contents.

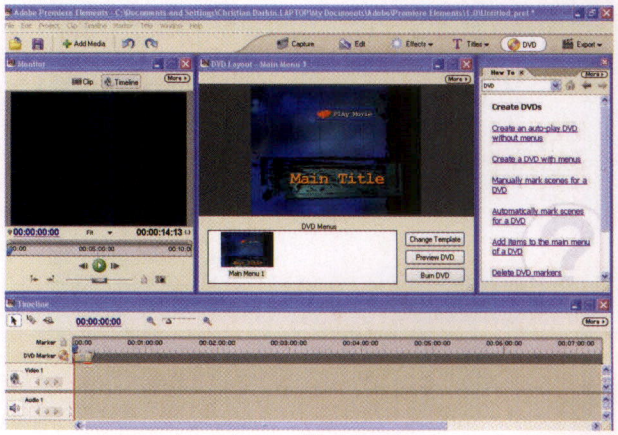


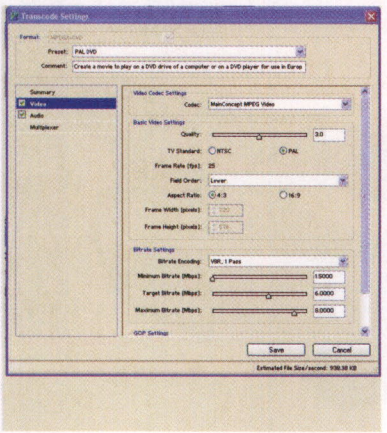
DivX is an implementation of MPEG 4 technology.



Below: DVDs can be authored by most editing packages nowadays. Video will be transferred to MPEG format before burning to disk.

Below right: Most video editors can export MPEG files. There's a confusing range of settings, but the presets nowadays are so good that you can pretty much ignore them.





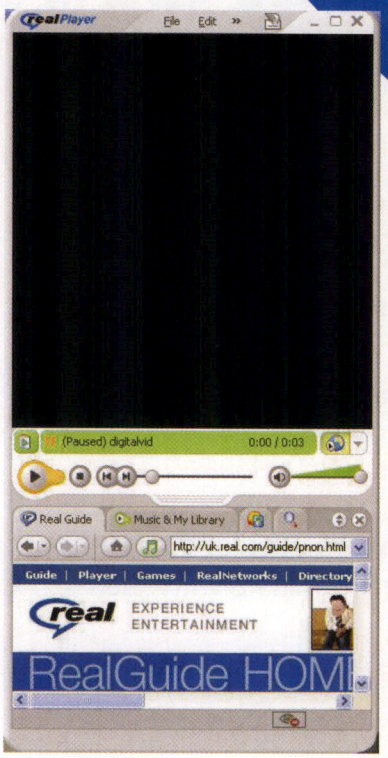
QuickTime (Mov)

QuickTime began life as the Mac's video player. Now, it's also available on the PC and, like the AVI format, it requires codecs to encode and play video. Many of the codecs on offer for AVI files are also available for QuickTime, so you can have QuickTime DV or QuickTime MPEG-4 files. You can't play Movs in Windows Media Player, and you can't play AVIs in Apple's QuickTime player, and this battle between the formats is annoying to a lot of users. It's also a fight which QuickTime can't win.

Above and below: Apple's QuickTime player will play back more or less anything but AVI files.

Realmedia

Realmedia was conceived as a way to stream video live over the internet. It was developed at a time when 28k modems were the norm, and that set the bar pretty high for compression technology. It's come on a long way since, but so have its competitors (namely MPEG and WMV). Realmedia remains one of the best ways to get the largest amount of video into the smallest possible space, and it has the advantage (or disadvantage depending on your perspective) that once your video is encoded as a RM file, it can't be edited. It can also be made available for watching without the viewer being able to download the file to their hard drive.



Right: Realmedia is the PDF of the video world. It's a good format for sending over the internet, but you can't edit the files.

Pros and cons at a glance

AVI

Pro — Wide range of formats

Con — You need the right codec to play the video

MOV

Pro — Can encode and play high and low quality clips

Con — Player needs to be installed

MPEG

Pro — High quality compression across a range of bandwidths

Con — Lots of competing providers mean not every player/encoder is compatible with all the others

Image sequence

Pro — Great for effects and animations

Con — No sound and no compression

DV

Pro — Great for editing your DV camcorder material

Con — Large files (1 hour = 13GB)

WMV

Pro — Good range of abilities

Con — Not as widely used as other formats

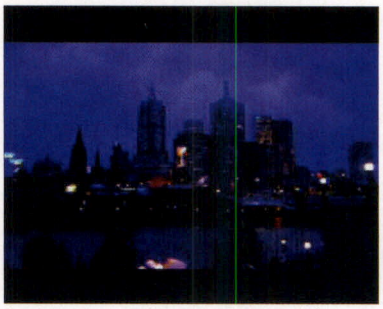
REALMEDIA

Pro — Lots of live internet broadcasts use this format

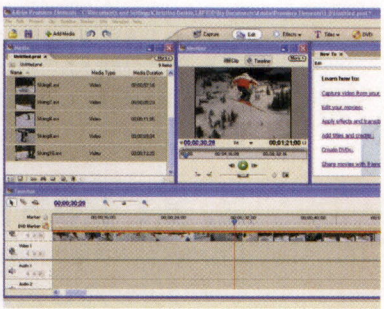
Con — Can't be edited

One for all?

All in all, there are a lot of formats because there are a lot of different things you can do with video footage. There's also pressure to create a single format that works for all situations and can be scaled from feature film projection right down to internet streaming, mobile phone video and DVD playback, and, at the moment, MPEG 4 looks to have got the closest. However, if you're editing, you'll still need a format that you can use without quality-loss straight from your DV camcorder. ca-p



Video is finding its way onto all kinds of devices. This image has been compressed to the resolution of a mobile phone screen. You can see the reduction in quality clearly.



Adobe *Premiere Elements* is one of the most popular desktop editing packages.

SUBSCRIBE & SAVE 30%

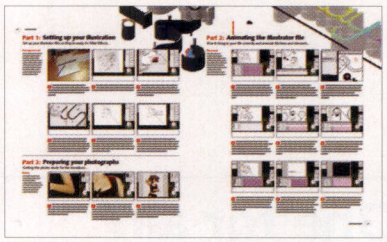
WHAT YOU'LL GET FROM *COMPUTER ARTS PROJECTS* EVERY MONTH:

- A CD packed with full software, demos and essential utilities
- An in-depth guide to a different creative subject
- Tutorials and tips that will increase your digital skills

Don't take our word for it...

"The in-depth nature of the tutorials makes the magazine invaluable to readers who are keen to learn."
Rob Coke, Creative Director, Studio Output

"*Computer Arts Projects* has always been at the forefront. Few creative magazines can communicate with such clarity to their readers"
Alun Edwards, Art Director, Twelve:Ten



SUBSCRIPTION ORDER FORM

☐ **UK £54** (RRP £78) **Rest of the world Turn to p39**

Your subscription will start with the next available issue

YOUR DETAILS

Title First name

Surname

Company name

Address

Post code Country

Tel no. (inc. code) home/work

Email address

PAYMENT DETAILS: I understand that I will receive 13 issues over the next 12 months

☐ Cheque (Made payable to Computer Arts. Sterling cheques drawn on a UK bank account)

☐ Mastercard ☐ Visa ☐ American Express ☐ Switch

Card no. ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐

Expiry date ☐☐ ☐☐ Issue number ☐☐

Signature Date / /2005

We will use the contact details you supply to contact you about your subscription. Indicate here if you're happy for *Computer Arts Projects*, Future Publishing and its sister companies to contact you with other information/offers by: ☐ email or ☐ telephone. Please indicate here if you do NOT wish us to pass your details on to carefully selected companies, to enable us to contact you about their products/services by ☐ email or ☐ telephone.

RETURN ADDRESS: Computer Arts Projects Subscriptions, Future Publishing, FREEPOST RLSC-SXSE-SKKT, Unit 4 Tower House, Sovereign Park, Market Harborough, Leicester LE16 9EF

ORDER CODE M007

HOW TO ORDER

1. ONLINE

Subscribe to *Computer Arts Projects* at www.myfavouritemagazines.co.uk/cos/m007

2. BY POST

Complete the form on the left and return it to *Computer Arts Projects* Subscriptions, Future Publishing, FREEPOST RLSC-SXSE-SKKT, Unit 4 Tower House, Sovereign Park, Market Harborough, Leicester LE16 9EF

3. BY PHONE

Call 0870 837 4722 quoting order reference M007

OFFER ENDS 22 JUNE 2005

SPECIAL OFFER

WRITE THE SCRIPT, SHOOT THE MOVIE, BURN THE DVD, GET RICH!
MOVIES ON YOUR DESKTOP
How to create a professional short film on your PC or Mac
THREE FULL PRODUCTS ON YOUR COVER CD • PLUS WIN £1500 WORTH OF SOFTWARE
FLASH AND DIRECTOR
Your guide to creating cutting-edge multimedia
DREAMWEAVER • FLASH • HTML • JAVASCRIPT • PHP • ASP • COLDFUSION • CSS
From designer to...
WEB DESIGNER
Spread your wings and become a coding genius with this expert guide
INDESIGN • QUARKXPRESS • PHOTOSHOP • ILLUSTRATOR
PrintDesign
Masterclass
11 IN-DEPTH TUTORIALS • FREE PHOTOSHOP PLUG-IN WORTH £45
THE ULTIMATE PHOTOSHOP GUIDE
THE COMPLETE GUIDE TO MAKING MONEY FROM YOUR DESIGN SKILLS
START YOUR OWN DESIGN BUSINESS
WIN THE ENTIRE MONOTYPE LIBRARY WORTH £2,999! • PLUS 2633 FREE FONTS ON THE CD
GET CREATIVE WITH
TYPOGRAPHY
28 CREATIVE TUTORIALS • OVER 1500 FILTERS, BRUSHES AND ACTIONS ON THE CD
THE COMPLETE GUIDE TO PHOTOSHOP
FILTERS & EFFECTS
CD INSIDE
MASSIVE GIVEAWAY: BOOKS AND LIMITED EDITION ARTWORK WORTH OVER £200
THE ULTIMATE GUIDE TO
PACKAGING
FREE CD INSIDE: RETRO FONTS WORTH $99 PLUS WIN BOOKS WORTH OVER £175!
THE ART OF
ADVERTISING
EXCLUSIVE COMPETITION: WIN $500 AND GET YOUR T-SHIRT DESIGN PRINTED FOR FREE!
THE INSIDER'S GUIDE TO...
ILLUSTRATION
EXCLUSIVE COMPETITION: WIN A TOP-OF-THE-RANGE HP A1 DESIGNJET PRINTER WORTH £1292!
EVERYTHING YOU NEED TO BECOME A
FREELANCE DESIGNER!
WIN ONEDOTZERO DVDS, BOOKS AND FESTIVAL TICKETS • PLUS FREE SOFTWARE ON THE CD WORTH $695!
MOTION GRAPHICS SPECIAL
MAKE YOUR IMAGES MOVE!
100 PAGES OF TUTORIALS, TIPS AND FEATURES SHOWING YOU HOW TO:
FREE CD INSIDE
CINELOOK 1.9

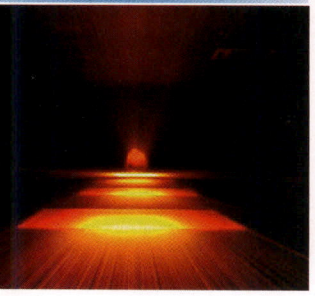
Only £54 for 13 issues (RRP £78)

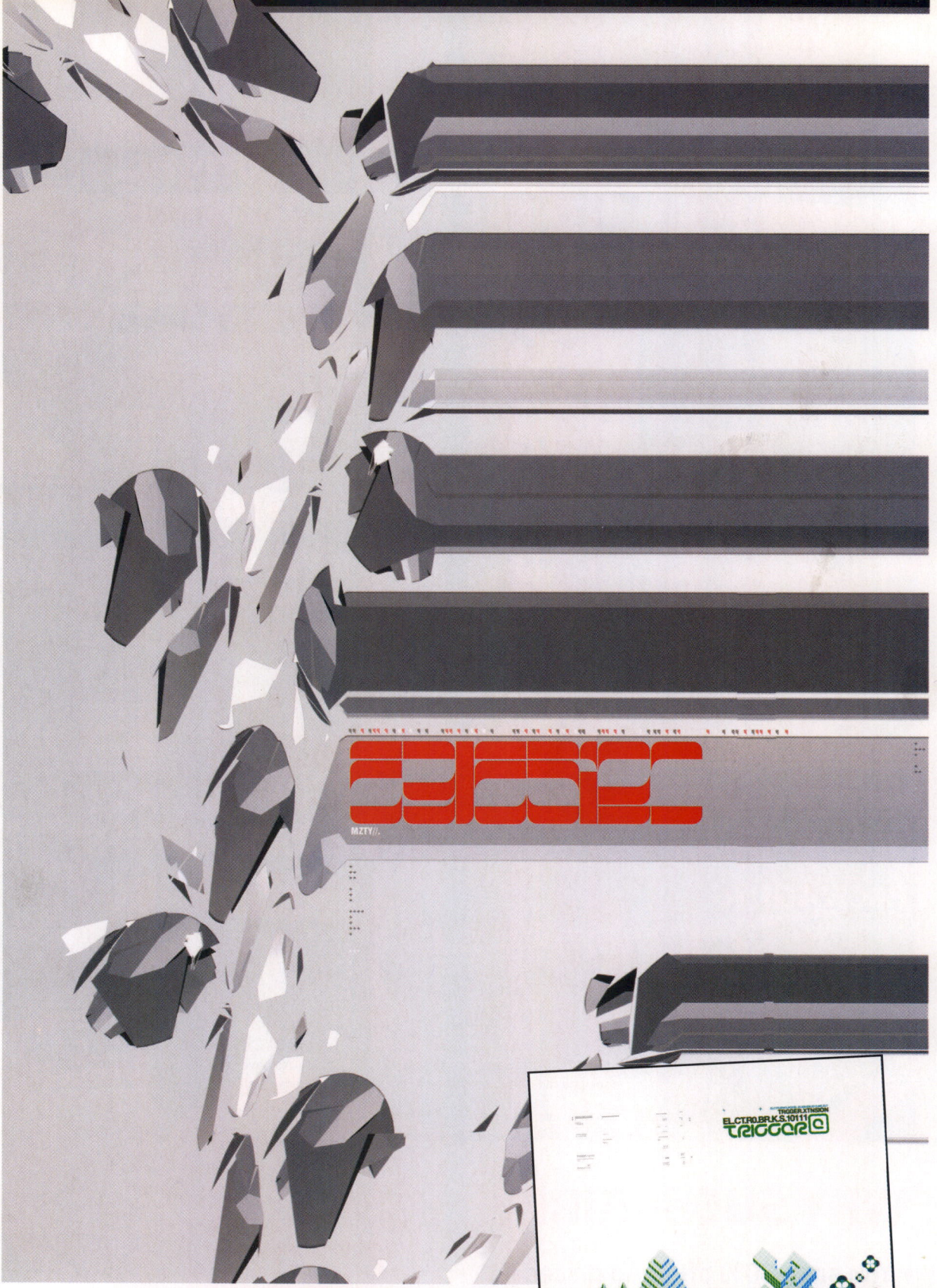
WHY SUBSCRIBE?

- You save 30% off shop prices
- Every copy delivered direct to your door
- Ensure your copy of the best in-depth creative guide

Order now at:

www.myfavouritemagazines.co.uk/cos/M007





Above: Clusta's 2004 Christmas video e-flyer, a taste of what's to come as motion graphics calls for "a perfect combination of all our disparate skills" and offers "a great opportunity to do cutting-edge work," according to Lead Designer Matt Clugston.

Main: Bespoke graphics done for an exhibition, Geometric Abstracts, held in a local coffee shop.

Right: Clusta has strong connections with Birmingham's music scene. "www.smokinjo.com was a way of stamping our identity on the city," says Matt.

[w] www.clusta.com

Clusta

"Clients understand that we're producing something different, something that will get them noticed." Lead Designer Matt Clugston on what makes Clusta click with its clients...

Very few design agencies offer a list of services long enough to require a scroll bar. Clusta does. "We are now a full service agency," explains Matt Clugston, before reeling off the list, which includes items as diverse as branding, post-production and illustration. He could go on just as long with the client roster, which includes names such as Sony Music, Orange and the BBC.

The obvious accusation is that skills will be diluted over such a wide area, but Matt disagrees. "We generally approach projects by assessing the clients' needs and then if there's a need for skills that we don't possess, we will learn them to get the job done to specification." So the skills are developed in response to a need, rather than in anticipation of one. "This has meant our evolution as a design consultancy has been quick," adds Matt. That's no bad thing: it shows a certain amount of esprit de corps, because expansion can be a demanding process. Proving this point he concludes that, "We would rather do a project well and learn something new than shy away from it because we didn't think we were capable."

Versatile style

Covering so much ground means that your output will be varied. Indeed, Matt notes with pride that "Our work is versatile." At the same time, though, Clusta is developing an identity of its own, leading Matt to believe that: "We've become known for a certain house style." This was reserved for more personal projects such as its own website, "or bespoke graphics projects."

Growing pains are not uncommon, the most familiar being the need to give clients what they want, not what you think they want. "We tend to put out stuff that we like," says Matt. "It's rare that we submit completely to the client's wants and produce something we don't think works." When you're growing up, though, you don't always have the choice. To its credit, Clusta says, "We always try to convince the client that our way is best."

Getting started

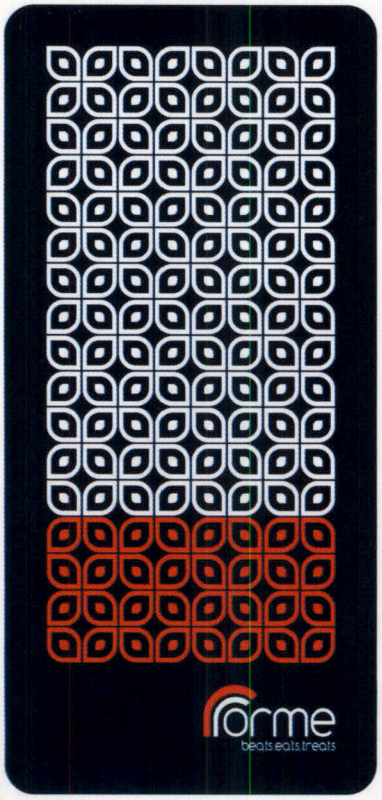
The Clusta team assembled organically. "Myself and Russell met at school," says Matt, "he's a true entrepreneur." Devon and Martin he encountered at art college: "Russell was heavily involved in club promotions and me, Devon and Martin were passionate about design."

As a team they did a lot of flyer work around Birmingham, "We still do," enthuses Matt. "It was a great outlet and a way of stamping our identity on the city." Clusta evolved from these early collaborations, gradually recruiting individuals like Major. "He's our programmer. His content management systems have helped us stay at the forefront of web technology," says Matt.

Early influences included the likes of Designers Republic, Attik and Me Company, but these have now been succeeded by the new breed: "As we got more interested in web we discovered a thriving community of new designers." These included the likes of GMUNK, Mike Cina and Presstube: "These are still some of our biggest influences now."

Word of mouth

"We haven't done a single piece of advertising in the last seven years," says a



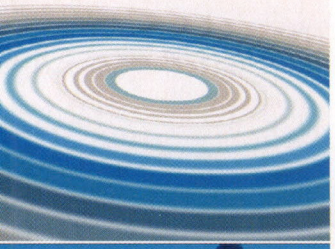
Above: Music video for Steve Lawler's *Andante*.

Bottom row, from left to right:

Flyer for Electro Breaks' 'Trigger' night.

Brand identity for the bar Forme.

Currently developing website for Pacha London. The diversity of these various projects prove that Clusta is indeed "a full service agency."



Top: On-line marketing video for Campus Networks, an American university portal.

Above: Brand identity for the club Factory in Birmingham.

very happy Matt Clugston. If you can say that, and you've been expanding, then you know you're doing something right. "It's all been word of mouth," the preferred way to find new clients.

The best thing about this approach is that clients are more likely to have an understanding of who and what they're dealing with. The other thing is that "they generally appreciate that we know what we're doing." This situation makes everyone less tense and the final result more freely arrived at.

"I think part of our charm is how we treat the client," says Matt. "We do very bespoke projects not fluffy templated reports; we produce custom solutions for people." In other words, you're not just a name and number on Clusta's project list. Clients are secure in the knowledge that its designers have their best interests at heart and if you have that understanding, the whole thing becomes a partnership.

Motion graphics

"Animation has always been very important at Clusta," says Matt. "That's why a great deal of our web solutions are *Flash* based." Both Matt and Devon studied 3D animation at university, giving Clusta a strong grounding in time-based media.

Matt prefaces an explanation of the special allure motion holds by saying, "Producing static graphics is great." Nobody's denying that, but "there's something about maintaining the aesthetic quality of graphics over a period of time that is both challenging and deeply satisfying." To make those who struggle with this feel a bit better, he adds, "if it works."

That brings us back to the subject of learning, something always on hand when motion graphics and web technology are being considered. The members of Clusta are all self-taught, keen to arm themselves with whatever technology is necessary to help their cause. "Even the courses we attended at university encouraged that," Matt points out, "because no one could teach what we wanted to learn." With that attitude in mind, "the technical barriers have always been small."

In the middle

The design community in England's second city is lacking in one important respect: "There isn't the same competitive aggression you find in London." This, says Matt, makes Birmingham a cool place for creative collaboration. He gives this as an example: "We recently teamed up with Fluid to produce a 'Devil May Cry 3' TV ad for PS2." He adds that, while it may be a small community, it's also a friendly one.

"Birmingham, on the whole, is good," says Matt. That's encouraging news because diversity is important in all things, design included. "It's not quite as exciting as London," but on the other hand it's not as inhibiting. This means "people here aren't consumed by just their own lives, it's not so much of a rat race."

Freedom from 'that London thing' gives Clusta enough head-space to think things through: "We want to get more into motion graphics work," says Matt. "Film credits would be something we would love to do." Once again diversity is the theme: "It would need a combination of all our disparate skills." The truth is though: "It would be a great opportunity to do some really cutting-edge work." ca-p

Above: Flyer for HipHop event AfroDizzyScratch.

Above: Logo ident for house producers Punkrok.

Staple job

"Our most recent job is for Helix," says Matt, who must be referring to the supplier of fine stationery goods because he goes on to say: "We've had the job of promoting their new stapler."

First up, Clusta converses with the client to establish this stapler's main chance: "What they want to get across. what we think is going to work." These aren't always the same thing, so a little diplomacy comes into play here.

These ideas are then storyboarded and presented to Helix. "The product is then modelled up in 3D and animated." Next come a couple of days' filming using a blue screen and a selection of actors, and, as Matt says, "the footage is then collated and fed into *After Effects*."

"We generally use a mixture of 3D, *Flash* and *After Effects* effects and overlays," divulges Matt. The whole thing now takes on a momentum of its own, " The script is written and approved, a voice-over is produced and, in this instance, done in three languages." Well if anything's international, stationery is.

The final stage simply involves running off the end product for its various outlets: "A CD-ROM is produced and email-ready MPGs are made for the viral campaign."

2 PACKED CDs! Stuffed with the latest full versions and trials of new Mac apps

Better music and movies!

Find out how to get better results from the iLife apps with our selection of 101 expert tips

All your Apple needs
Mac FORMAT
Packed with great advice and reviews!
+2 FREE CDs
ISSUE 157 July 2005
101 INSIDER TIPS FOR iLIFE
Take iLife to the next level. Get better movies, music and photo albums today!
HOW TO...
Turn your Mac into a media centre p62
Create cool reflections in Photoshop p42
Save time finding folders and files p58
Use drag and drop to design a website p46
Cricket 9.2 FULL VERSION
Play with the best teams from all over
20 GREAT PLUG-INS
iLife tools
Expand the abilities of your favourite iLife apps
PLUS!
Football Manager 2005
Try your hand at running a Premiership football team! Demo
1 YEAR LICENCE
GraphicConverter
Full, latest version of the famous photo editor
(Version 5.6.1 licence expires June 2006)
Cinema 4D
Make 3D pictures & animations with this new demo version
Mac FORMAT TOOLKIT CD
Apple software to help you work, learn, relax and play
Earn your stripes!
We take the stress out of installing Tiger
Clash of the Titans
How Apple stacks up against Microsoft
Future

PLUS! This issue, we bring you...

How to... The best tutorials

- Turn your Mac into a media centre
- Create cool reflections in Photoshop
- Save time finding folders and files
- Use drag and drop to design a site

And much more!

Reviews The best tests

Full review of OS X 10.4 Tiger, plus we put eight hard drive backup devices through their paces in our extensive group test

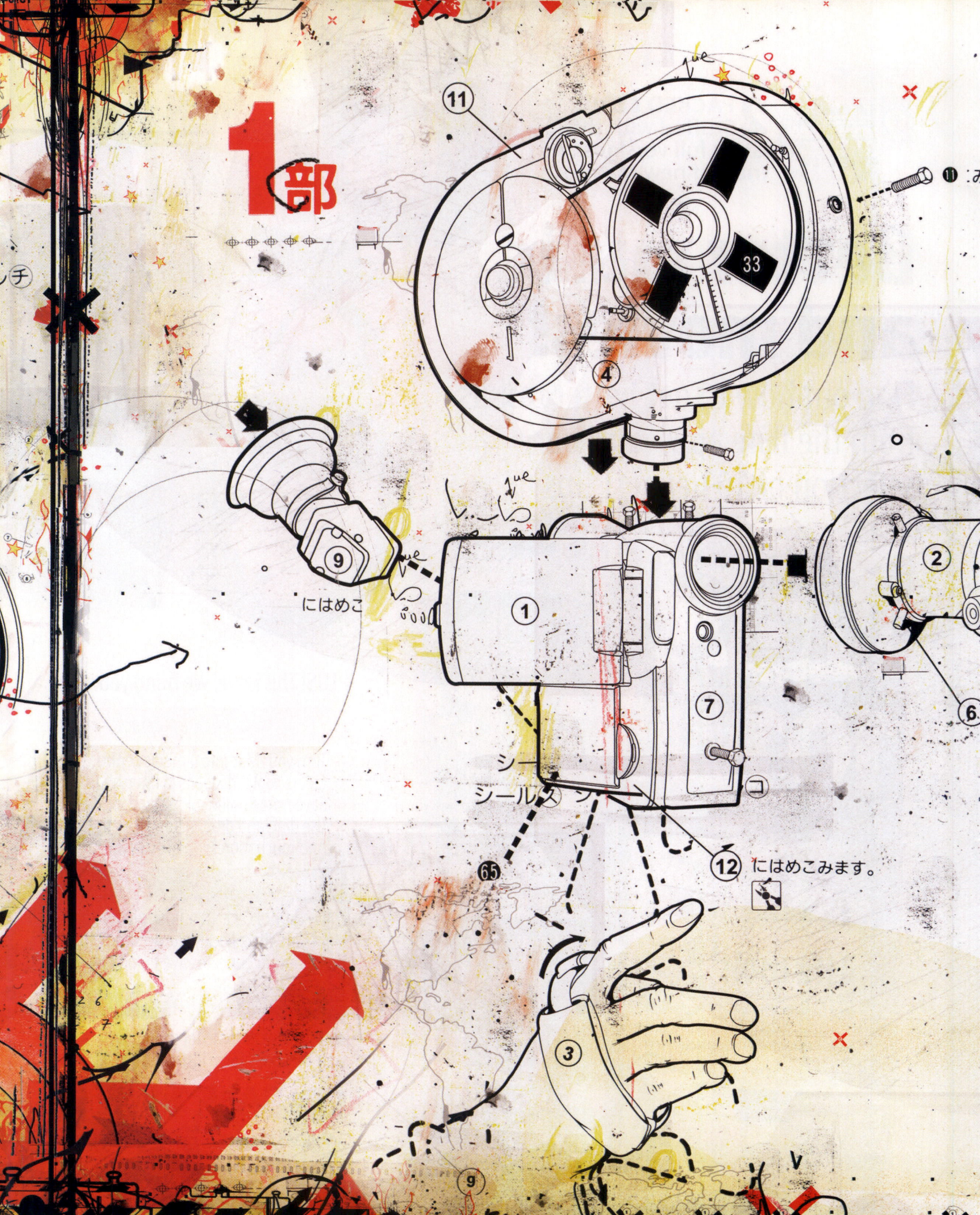
Q&A The best advice

It's the place to come for solutions to your Mac questions. Just write in!

ON SALE 1 JUNE

www.macformat.co.uk

1部



FREE SOFTWARE ON THE CD! WORTH $695

Tutorial

[illustration] Neal Murren [w] www.nealmurren.com

Digital celluloid

With *CineLook* free on your CD you can make digital video look like pristine 35mm footage, or add scratches, stains and flickers to simulate aged film...

Video doesn't usually look like film, because it's sharp, free of grain and has particular video-like colours. With *CineLook*, you can simulate the look of film, or even add artefacts of damage, to create the impression of old film. *CineLook* is a powerful plug-in, and it's tempting to just turn up the settings and see what happens, but you get better results if you have a finished look in mind before you begin.

The following tutorial shows you how to achieve specific looks, through combinations of settings. If you want to create footage that's supposedly being projected onto a movie screen, you can add more flickering and slipping. If it's meant to be restored footage, it won't be quite as damaged. For 35mm footage, the effects should be subtle – if the grain leaps out at you, something is wrong.

Smooth grain usually looks best, but be warned that render times are longer the smoother your grain. It's worth planning for a long render to get the best possible look, rather than reducing smoothness. If your system lags, turn down *After Effects* resolution to half or a third, while you work on colours and grain. When everything is set, you can see what it looks like at full resolution.

Please note, the Mac version of *CineLook 1.9* on your CD doesn't contain the Film Damage filter. However, to complete the parts of this tutorial that use this effect, you can download a demo of version 2 from [w] www.digieffects.com. The Windows version on the CD does contain the Film Damage filter. You can also download a number of presets for *CineLook 1.9* to speed up the working process. See [w] www.digieffects.com/presets.shtml.

Expertise provided by Christopher Kenworthy, a novelist, film director and part-time actor living in Australia. He can be contacted at [e] thoughtfox@mac.com.

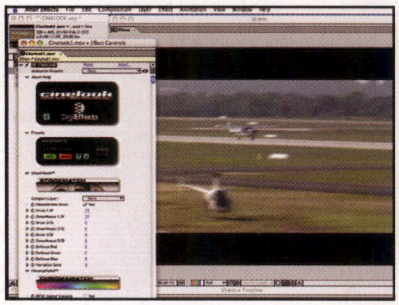
All the components needed to complete this tutorial can be found on the *Computer Arts Projects* CD72 in the Software\Tutorials\Tutorial files\Tutorial files\All\Cinelook folder.

Part 1: 35mm look

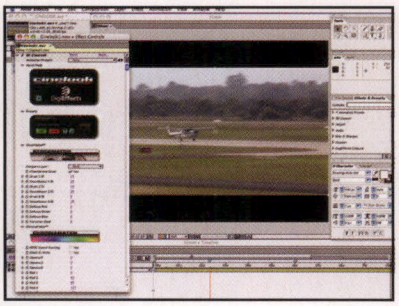
Start by creating the smooth, rich look of 35mm celluloid...

Soft mask

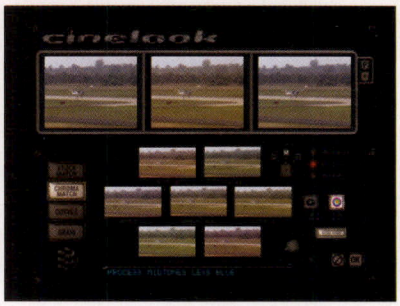
Soft masks can enhance the appearance of your footage, by reflecting the way that old film is usually seen when projected. To create a soft mask, draw an outline with the Rectangular Mask tool, and set Mask Softness to 15 or more. For 8mm footage, a square image is more realistic than rectangular.



1 Create a New Project and a New Composition in *After Effects*, import the Cinelookraw1.mov from CD72 to the timeline, and apply the *CineLook* filter to the footage. A default film-look is applied. Under Stockmatch, set Grain 1/R to 15, and Smoothness 1/R to 25.



2 You can also apply softer, less noticeable grain to the other layers. Set Grain 2/G to 10 and Smoothness 2/G to 25. Set Grain 3/B to 5, and Smoothness to 25. The grain should not be too noticeable on a still frame, and should remain subtle when animated.



3 To the right of the Presets buttons, click the mini-console. You can now switch to Console mode, where adjustments can be made visually. On the left, click on Chroma Match, to change colours. With the button on the right set to Midtones, click More Red and Less Blue, once each.

4 You're aiming to replicate the look of 35mm film, rather than actually grading the colour (you can still do that later). Your colour work here builds a relationship between colours that looks more film-like. Click Shadows, and click More Red twice, and Less Blue once.

5 The Timematch settings add a slight motion blur, which gives the footage a film-like quality. Set Time Slur -1f to 18. The next three settings should be 12, 8 and 6. Don't use the Blend feature, or the images will tend to echo over each other.

6 Export your footage, and either burn it to DVD, or play it back through your video camera. It's important to watch the footage on a real TV screen rather than a computer monitor, because computer refresh rates tend to hide the video look, giving everything a blurry film quality.

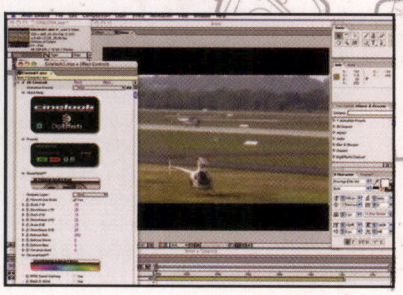
Part 2: 8mm footage

Recreate the grainy impression of 1970s 8mm footage...

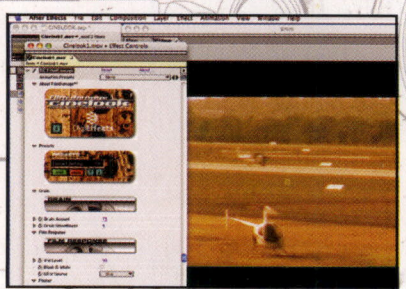
TV test

Always take the time to output any film-look footage to tape or DVD, so you can watch it back on a TV screen. Most computer monitors hide the sharp quality of video, and make it look more film-like, so it's vital you check your results on a TV screen. A TV test is also the best way to see whether grain settings (made in a small computer window) look good at full size.

1 To simulate grainy 8mm footage, you'll want the grain to be much more noticeable. However, it shouldn't be so grainy that the audience actually sees the grain. For each of the Grain layers, set Grain to 15 and Smoothness to 25.

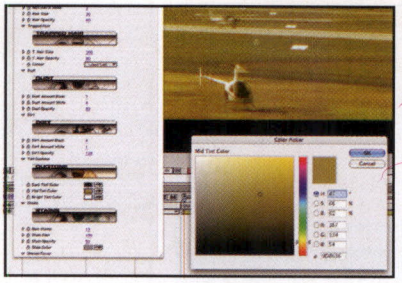


2 Under the Stockmatch setting, change the Defocus Red setting to 300. You can defocus any one of the colours to help achieve an 8mm look. This colour shift wasn't present back in the 70s, but 8mm film has aged, and now has this kind of colouring.

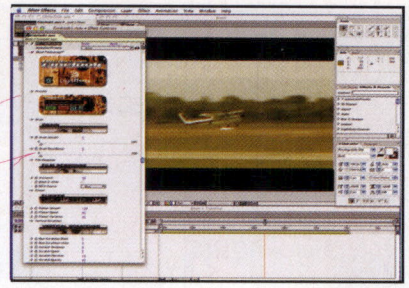


3 Apply the *CineLook* Film Damage filter. The default settings add a lot of damage to the image, some of which should be removed. To bring some colour back, uncheck the 'Black & White' box, under Film Response.

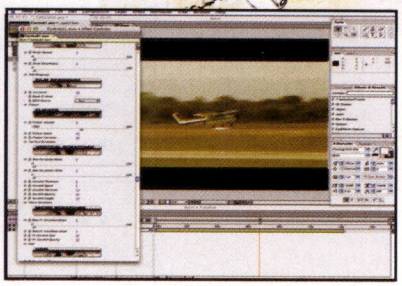
8mm footage continued...



4 The tint is far too sepia for 8mm, so click the Mid Tint colour box, and select a colour that's slightly yellow. A red hue will also give a realistic impression, and a light green will look like 8mm that's been overexposed, or that has aged badly.



5 Under the Grain setting, shift both the sliders to zero. Grain has already been added with the basic *CineLook* filter, and more will only slow down your render time. For short clips, long renders aren't a problem, but if you're processing a whole film, every time-saver helps.



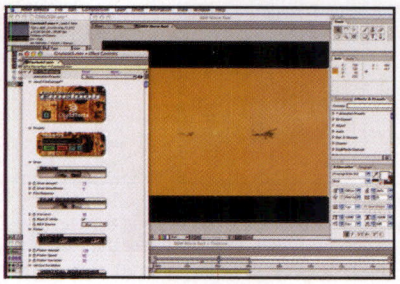
6 If you want to simulate 8mm footage that's been projected so often the film is damaged, you can leave the default settings. But to get the nostalgic 8mm look, without such artefacts, reduce flicker, hairs and dirt to 0.

Part 3: Black-and-white newsreel

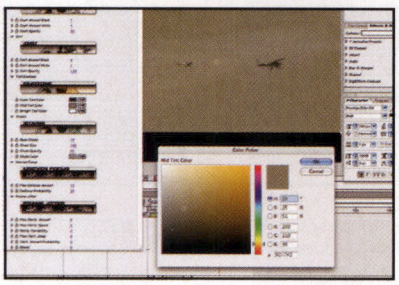
In this section, we show you how to create the illusion of restored newsreel footage...

Toggle shots

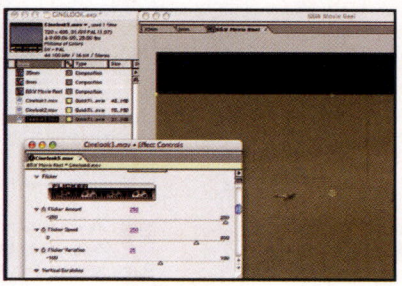
If you're creating a whole sequence of shots, rather than just one or two, you might be tempted to apply the *CineLook* filters to your whole film at once. It's worth applying the filter to each shot individually, to prevent overly dark or bright shots reacting badly to the filter. To save time, create a preset for one shot, and apply that to each subsequent shot, then adjust the settings to make sure brightness and quality are consistent.



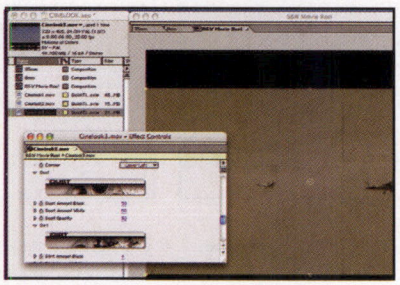
1 To create the look of old black-and-white newsreel footage, you need to apply the basic *CineLook* filter, but zero all the settings, apart from Time Slur, which should be set as in 35mm. Then apply Film Damage, and leave the 'Black & White' box checked.



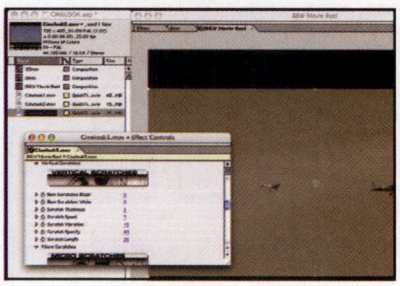
2 The Duotone settings are, by default, a strong sepia, which looks quite orangey. To create a black-and-white look, shift the Mid Tint colour towards grey. For pure black-and-white, choose a grey with no hint of orange.



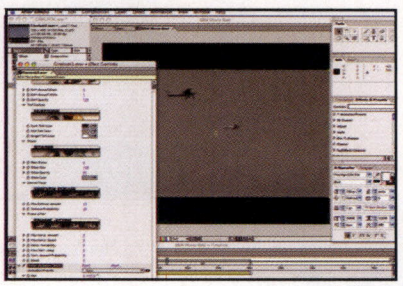
3 A strong flickering effect can help to create the impression of genuine film footage. It would take hours to achieve this without the filter. Set Flicker Amount to 250, Flicker Speed to 250 and Flicker Variation to 25. These settings can be experimented with, to achieve particular looks, without affecting render times.



4 The Dust settings add a barely visible sheen to your footage, but this does help to create the aged film feel. Set the Black and White Dust settings to 50, but keep the Opacity down to around 30, so that the dust remains subconscious rather than completely visible.



5 To create the impression that this footage has been restored, or treated as well as possible, zero the settings for strains, scratches and hairs. Although these settings are all impressive, bear in mind that you don't always want your film to look like it's been half-destroyed.



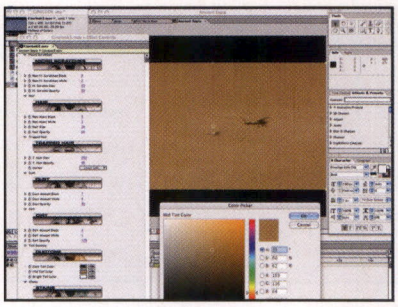
6 If you're happy with the look, you can output, but you may want to add a Hue/Saturation filter, and reduce the Saturation to zero. A pure monochrome image speaks of a particular era of filmmaking – around the time of the Second World War – better than sepia ever can.

Part 4: Ancient sepia

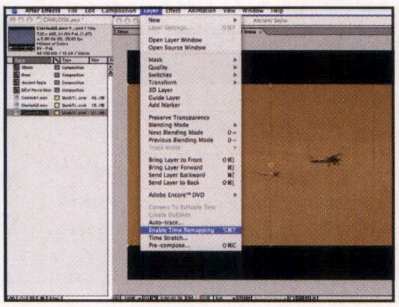
Create an effect that's as damaged as film gets, with stains, scratches and hairs...

The real thing

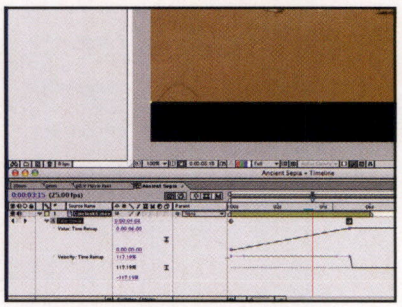
If possible, use real film footage for comparison when creating film-look effects. If you want to create recent 35mm film-looks, watch a recent DVD, and note how sharp it looks and how subtle the grain is. If you're creating 8mm, try to watch real 8mm and note the quality of grain and colour.



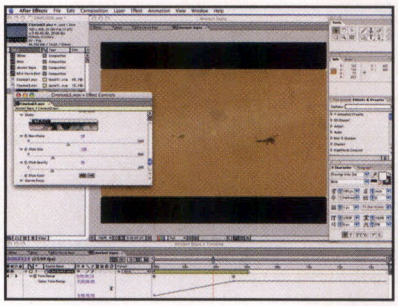
1 To create damaged, sepia film, from a long, long time ago, the Film Damage filter is a good place to start. You can also add *CineLook* to create Time Slur, but Film Damage will do most of the work. Set the Mid Tint under the Duotone setting to be browner and lighter than the default.



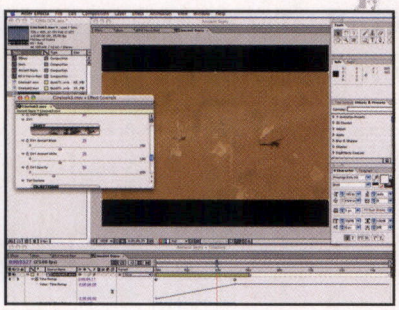
2 With your clip selected, go to the Layer menu and select Enable Time Remapping. This enables you to speed up the clip slightly, to create the look of hand-cranked cameras. Don't overdo this effect.



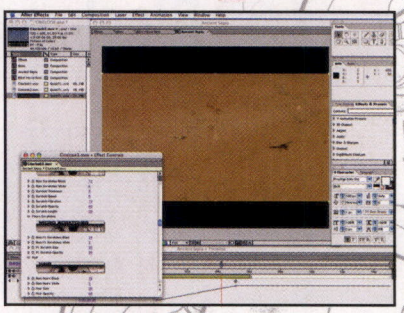
3 Expand the Time Remap settings, so you can see the keyframe diamonds. Drag the keyframe diamond on the far right, slightly to the left. A short drag of less than a second will speed up the clip enough to create the old film-look.



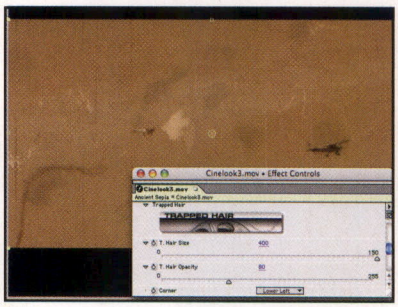
4 *CineLook* comes with realistic built-in stains, which add to the look of ancient film. Under Stains, set the Number of stains to 60, with Size at 100, and Opacity at 50. To set the stain colour, use the eyedropper to sample a dark colour from the footage itself.



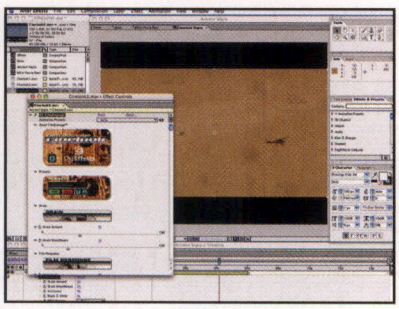
5 Although stains provide a good look, the Dirt settings add extra blotches that make it look as though the film's been through a lot. Set both Black and White Dirt Amounts to 25, but keep the Opacity at 50 or less, because this dirt shows up quite brightly.



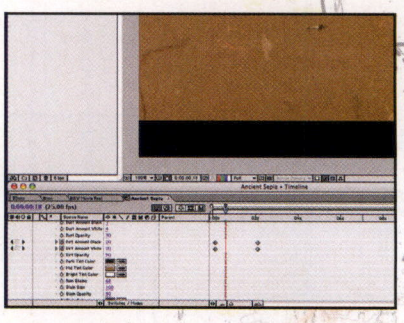
6 Micro scratches can be set at 24, for both Black and White, but keep the Opacity down to 20, or these become too distracting. Under Hair, set the number of Black hairs to 15, but keep White at 2 or 3, as white hairs are very noticeable. Hair Size should be 20, with Opacity at 60.



7 The Trapped Hair setting enables you to choose a corner in which to show a hair, which appears to be trapped, either during projection or in the camera when the film was shot. It's a small detail that adds realism. Set Hair Size to between 100 and 400, and Hair Opacity to 80.



8 Although noticeable grain can be a problem, for really old film you want the grain to be seen so that the audience imagines that this is really old, poor-quality film stock. Set Grain to 30, and Smoothness to 20. Low Smoothness settings are rarely more realistic, only quicker.



9 Most film is dirtiest during the first couple of seconds, as this is where the film is physically handled, so let the dirt and stains reduce over time. For trapped hair, dirt and stains, click the keyframe clock at the first frame. Then, two seconds in, reduce these settings to zero.

Part 5: Projection artefacts

Finally, you can create the impression of slipping sprockets and loose film...

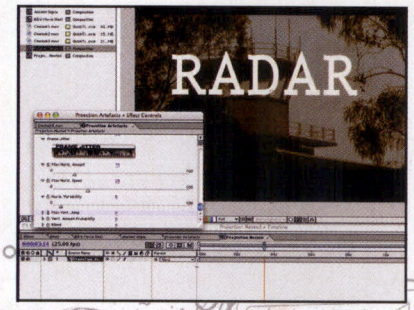
Sound matters

The clips provided for this tutorial contain the sound of the planes taking off, but for really old film this is less realistic than the sound of a projector. Record a real projector, or download a clip off the net. Projector sounds, and voice-overs, add more realism than actual background sound ever can.

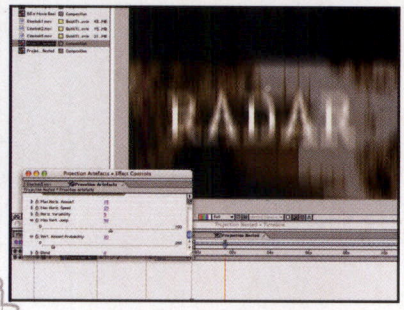
1 If you're using titles, you'll want to add them before the film treatment to ensure they get the same look. Use the Text tool to add your titles to the footage, and reduce the footage Opacity to 50.

2 Create a new composition. Drag the first composition, containing two layers, into the new composition. This enables you to treat the previous composition as a single-layer clip, meaning you can apply a filter to both layers at once. This is more efficient than exporting the footage and reimporting.

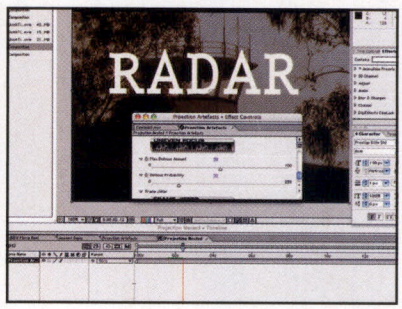
3 Select the new clip, which will show as a grey strip in the timeline, and apply the basic Film Damage effect, and then create the film-look you want. Complete this before adding projection artefacts. Whatever film-look you create, you can now add movement that makes it look as though the film is being (poorly) projected.



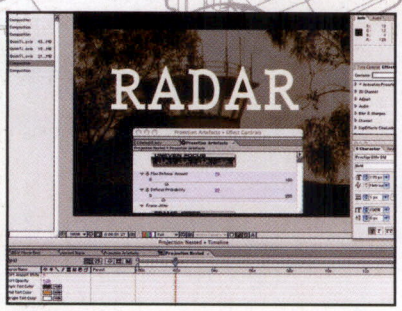
4 Gate weave is a slightly horizontal movement, seen in all 35mm film as the sprockets wear down and the film slips. Even brand new 35mm prints show gate weave within a few days, and old films weave a lot. Under Frame Jitter, create gate weave by setting Horizontal Amount to 15, Horizontal Speed to 25 and Variability to 5.



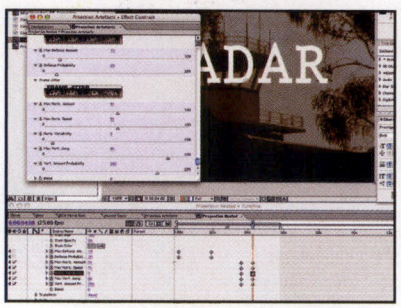
5 The vertical settings in Frame Jitter simulate missing or torn sprockets, where the film physically slips for a moment. This is less common than gate weave, but is seen reasonably often in old film. Set Max Vertical to 50, and Amount Probability to 20 or less.



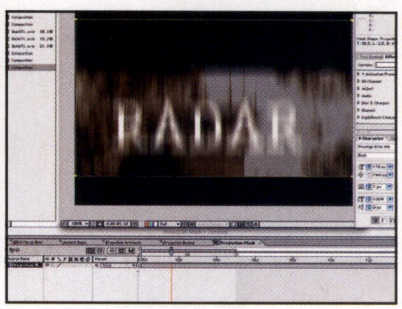
6 The Uneven Focus settings simulate the way that old film goes in and out of focus as it drifts in front of the projection lens. Brand new film doesn't do this, but old film can defocus due to inconsistencies in thickness and sprocket problems. Set Defocus Amount and Probability to 50.



7 The defocus effects are usually more noticeable at the beginning and end of a reel. If you're simulating an entire reel of film, use keyframes to make the effect more noticeable at either end. Here, click the keyframe clock for Defocus at the start of the clip, and reduce the Amount to 10 and Probability to 20, after a couple of seconds.



8 Gate weave is also more noticeable when film is spooling in or out of a projector. In this example, the keyframes have been added at the end, to create a sudden increase in gate weave. The settings are increased only over the last second.



9 The slurring frame jitter effect makes the widescreen image bleed into the square frame. To correct this, create a new composition, drag the previous composition into the new one, and then use the rectangular mask tool to frame the widescreen shape. ca-p

PROVIDES A NA… A TO THE MOUSE THEN THE CINTIQ MANAGES TO TAKE THE CONFIGURATIONS STEP FURTHER AND FUSE TOGETHER THE GRAPHIC TABLET AND THE MONITOR, WITH BOTH INCL… GRAPHICS CAPABILITY BOTH RGB AND …

1600X1200 PIXELS IS … OF COURSE, YOU … PRESSURE SENSITIVITY, ANGLE RECOGNITION, TOUCH STRIP AND EXPRESSKEYS, AS WITH THE INTUOS. ALL OF THESE EXTRA … ARE VALUABLE ADDITIONS WHEN COMPARED WITH A TABLET …

Feature

[illustration] Johann Chan **[e]** johann.chan@futurenet.co.uk

Essential kit

Get your motion graphics moving in the right direction by ensuring you have the best hardware and software for the job...

By its very nature, motion graphics is an intensely demanding process. It requires a system set-up capable of supporting the media and creating the kind of professional results that distinguish your work from the many Wizard-driven consumer applications on the market.

Over the following pages, we've picked out a few key bits of kit to help you get that cutting-edge over the competition. Although your chosen platform may dictate the kind of software you end up using, there are many peripheral items that will both improve your workflow and enable the kind of creative freedom that is impossible to achieve with regular input devices such as the traditional mouse-and-keyboard combo.

So if your current system isn't performing as efficiently as it once was, the following options should bring back that sense of creative freedom you had before you became distracted waiting for those progress bars to complete.

Mesh Matrix Titan DVI-X

A beefy Windows-based system that manages to contain some powerful components beneath its stylish casing...

A powerful system should form the foundation of your motion graphics set-up, and the Mesh Titan DVI-X is sure to satisfy anyone based on the Windows OS. Peer into the casing and you'll find an AMD Athlon64 4000+ processor being supported by a whopping 2GB of DDR RAM, which gives the system the kind of muscle that can handle even the most intensive of tasks. Add to this a 256MB ATI Radeon X850XT graphics card complete with TV/out and DVI support plus a dedicated TV capture card and you have all the graphics power necessary to experience the smoothest playback whether you choose to output to a regular TV or your monitor.

Storage is another issue that needs addressing because video and audio data will inevitably eat away at your disk space and slow down your system overall. To accommodate this, a pair of RAID configured ultra-fast hard drives that total 660GB of storage space will mean you won't need to think about upgrading or reaching for the external HDD for quite some time. You may choose to upgrade the standard audio card although the 5.1 surround sound 6 channel option included is more than adequately represented by the stylish Creative Labs Inspire T7900 7.1 speakers.

Naturally, DVD burning is taken as standard with dual drives included. A regular Sony 16x DVD-ROM drive is complemented with the same brand's 16x dual layer rewritable DVD drive, which supports any DVD format you care to export your final project to.

The inclusion of a 56k modem and floppy disk drive neither adds nor detracts points from the system's overall score, and how useful you'll find the pre-installed software is open to debate. In addition to the usual suspects of *Works 8.0*, you'll find a comprehensive range of tools available courtesy of CyberLink including its *PowerDVD*, *PowerDirector* and *PowerProducer* titles, although we'd have to question how long such applications would stay installed on a professional user's system.

With the inclusion of a 19-inch ViewSonic VX912 DVI LCD monitor, a wireless mouse and keyboard and a universal media reader, you're certainly getting value for money and a system which will handle almost anything you care to throw at it.

Price £1,643
Manufacturer Mesh
[t] 0870 0464 747
[w] www.meshcomputers.com

arts projects verdict

In brief: The bundled software may be a bit suspect, but the Titan provides a powerful combination of hardware components which will support the most demanding Windows-based video work.

Apple Power Mac G5

The Power Mac G5 is a true 64-bit system with dual processors, and it's the envy of many a Windows user...

The battle for supremacy between Macintosh and Windows disciples had calmed somewhat as the margin of difference in terms of performance grew narrower. Systems became more evenly matched while cross-platform software applications such as *After Effects* and *Photoshop* were virtually identical bar the odd interface modification depending on which system's GUI you were using. However, with the emergence of the current Power Mac G5 range with dual processor support ranging between 1.8 to 2.7GHz, there will undoubtedly be a few more tedious threads on the subject being raised on forum sites around the world.

Windows users have long enjoyed 64-bit CPUs, but with no confirmed plans from Microsoft for a 64-bit OS until Longhorn is released, they must stand aside as their Apple colleagues boast about their superior hardware acceleration thanks to the recent release of OS X Tiger. Such an improvement provides better memory handling, although you may choose to upgrade the standard 512MB DDR RAM because this can slow down real-time video previews in *Motion*. However, with a maximum memory capacity of 8GB, this can soon be put right with a little extra cash.

The ATI Radeon 9650 graphics card with 256MB of DDR memory provides a valuable boost to performance when working with motion graphics although if you want to make use of the new 30-inch screen, you'll also be stung for an extra £300 to upgrade to the necessary nVIDIA GeForce 6800 Ultra card to support such a luxury. There is no monitor included in the price so you'll also need to budget for this essential peripheral; a standard system with monitor will cost over £2,500, while beefing things up with additional RAM, a 30-inch monitor and nVIDIA card will bloat your credit card bill to just short of £5,600. And if your finances aren't already feeling the pinch, you may want to consider increasing the hard disk capacity from the standard 250GB – dual 400GB disks will add an additional £460.

It may not be cheap, but it can't be touched for speed, and if Apple is your chosen platform and you have the budget then this is the ultimate system that will keep your PC-owning buddies quiet for some time to come.

Price £1,999
Manufacturer Apple
[t] 0800 0391 010
[w] www.apple.com

arts projects verdict

In brief: The ultimate computer system available commercially. It's fast and reliable and has a true 64-bit OS thanks to Tiger, but check out that price-tag!

Wacom Cintiq 21UX

A fusion of monitor and graphic tablet that may take some getting used to, even for experienced tablet users...

If the Intuos3 (see top right) provides a natural successor to the mouse, the Cintiq manages to take the concept one step further and fuse together the graphic tablet and the monitor. With both Macintosh and Windows support, the display replaces your monitor, plugging directly into your systems graphics card via both RGB and DVI to give you a generous 21.3-inch high-res display mounted on an adjustable stand.

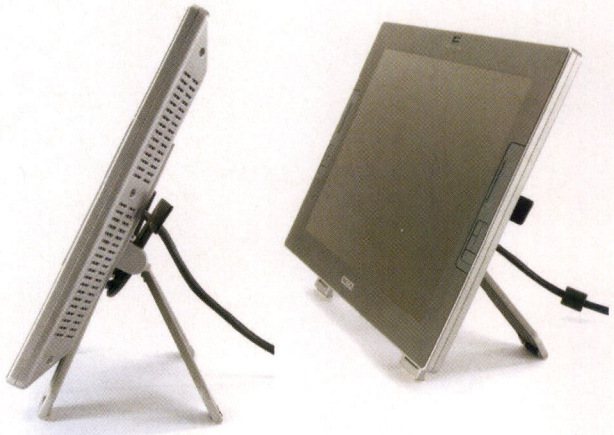
This stand proves essential as you use the regular stylus directly on the screen for the ultimate in hand/eye coordination with a computer's input device. Drawing directly onto the screen may take some getting used to, and with such a hefty price-tag you'd be well advised to try before you buy, but those experienced with graphics tablets should appreciate the direct control such a device enables.

A maximum resolution of 1,600x1,200 pixels is available and, of course, you get pressure sensitivity, angle recognition, Touch Strip and ExpressKeys. As with the Intuos3, all these features are valuable additions when compared with a Tablet PC.

Price £2,172
Manufacturer Wacom
[t] +49 215 136 140
[w] www.wacom.com

arts projects verdict

In brief: The ultimate marriage of display and input technologies, but it's bulky and not to everyone's taste. And check out that price!



Wacom Intuos3 A4

Not only is the pen mightier than the sword, but it also happens to beat the mouse into submission too...

The standard mouse was originally designed to provide basic input control over your computer's cursor: to click on buttons, select form fields and perform other rudimentary actions. However, as a more creative tool, the standard design leaves much to the imagination with little precision control.

Wacom leads the market in graphic tablets and its latest Intuos3 range improves on previous generations with more than just sleek design aimed at today's iPod generation. Improved resolution, a more comfortable stylus and better configuration options with the supporting software are certainly tempting options, but the new Touch Strip and ExpressKeys add a new level of interaction for keyboard shortcuts, scrolling and selection options without your hands leaving the tablet or your eye leaving the screen.

The larger A4 model provides the most freedom of movement, the A5 model may suffice if desktop space is precious, while the A6 offers the convenience of a more flexible mouse replacement with good drawing capabilities.

Price £346
Manufacturer Wacom
[t] +49 215 136 140
[w] www.wacom.com

arts projects verdict

In brief: An essential tool that quickly illustrates the limitations of the traditional mouse, but you'll need a generous amount of desk space.

ShuttlePRO 2

A multi-button jog and shuttle controller for single-handed control over video playback...

As essential as the graphic tablet might be, it provides little advantage over video access when compared to the mouse. Although your editing software will include jog and shuttle options, this still requires a slight distraction as you reach for your mouse and click and drag your on-screen controller with half an eye on the actual footage.

For a modest price, the Mac- and PC-friendly Contour ShuttlePRO 2 brings back the old analogue method of controlling playback. The inner jog rotates through 360 degrees to provide precision frame-by-frame control while the outer spring-loaded shuttle offers intuitive fast forward and rewind options. In addition, there are 15 buttons within easy reach that are pre-configured for many leading audio and video applications although they remain fully configurable should you wish to customise them.

Its small footprint means you don't need to sacrifice too much desk space, and the unit is powered through USB so you won't require additional power points either. For the experienced video professional, such a device is simply essential.

Price £93
Manufacturer Contour Design
[t] 0208 7311 410
[w] www.contourdesign.com

arts projects verdict

In brief: There is little to fault about the ShuttlePRO. With functional, ergonomic design at such a reasonable cost, this becomes an essential buy rather than a luxury.

Adobe After Effects 6.5 Professional

After Effects is the motion graphics application that leads the field for both Macintosh and Windows systems...

Mention motion graphics to anyone in the creative industries and they'll automatically think of Adobe *After Effects*. Now on version 6.5, the established title leads the way for rival upstarts, such as Apple *Motion*, and has set a high standard to which dedicated plug-in applications, such as *Boris Red*, develop their tools for compatibility.

Offering natural integration with related Adobe titles, from the ubiquitous *Photoshop* through to *Premiere* and other Adobe Video Collection titles, *After Effects* provides the most universal industry standard motion graphics title available.

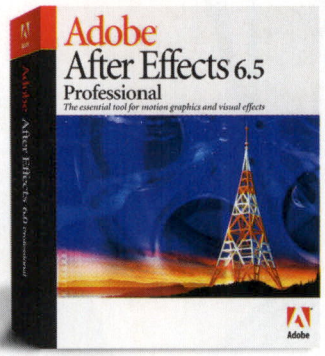
Motion tracking, keying and matte tools, warping and distortion effects and an advanced particle system provide some of the more advanced features found in the more expensive Professional version, although for around £400 less, the Standard version still provides an effective 2D and 3D compositing environment including text animation tools, keyframing, masking and professional output options.

Price £1,075
Manufacturer Adobe
[t] 0208 6061 100
[w] www.adobe.co.uk

arts projects verdict

★★★★½

In brief: *After Effects* is the industry standard to which other titles aspire. Cost may be prohibitive, but if you're serious about your work, this should be high on your shopping list.



Boris Red 3GL

Whether employed standalone or as a plug-in to your existing motion graphics software, *Red* provides some powerful additional features...

A major player within the video community, *Boris FX* provides professional broadcast-quality software for titling, effects compositing and 3D directly inside its non-linear editing system. *Boris Red 3GL* is its flagship title, which can be used either as a standalone application or as a plug-in compatible with leading products such as *After Effects, Premiere, Avid* and *Final Cut Pro* on their respective Mac and PC platforms.

Combining robust 3D creation and animation, native vector titling, vector pain, rotoscoping, motion tracking, slow motion plus a wide range of quality effects, this is not an application to be taken casually. With professional editors firmly in mind, the software presents a range of advanced and sophisticated tools that are sure to give you the ultimate freedom as you expand your editing system.

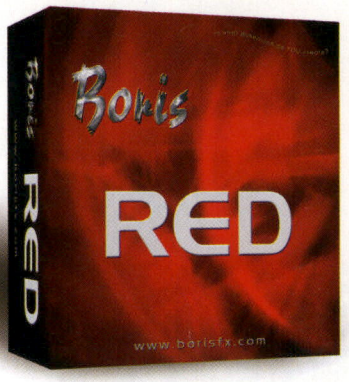
The cost may force you to think twice, but if you're hoping for a career in the video industry then a familiarity with *Boris Red* will prove to be a major credit to your CV.

Price £949
Manufacturer Boris FX
[t] 01264 326 384
[w] www.borisfxeurope.com

arts projects verdict

★★★★½

In brief: *Boris Red* provides an industrial strength motion graphic application. If you can't make your projects shine with this, a change of career may be in order.



Macromedia Flash MX 2004 Pro

As broadband takes over internet delivery, video producers are finding a new online audience eager to view their work...

You may think *Flash MX Pro 2004* is an unusual inclusion as the title is synonymous with the web, providing the vast majority of content for interactive sites. Admittedly, web designers still form its core target market, but as broadband connections become more popular, many independent filmmakers are turning to this global platform to publicise their work. And in recognition of such, Macromedia now provides an additional, freely downloadable component in the form of the Macromedia Video Kit.

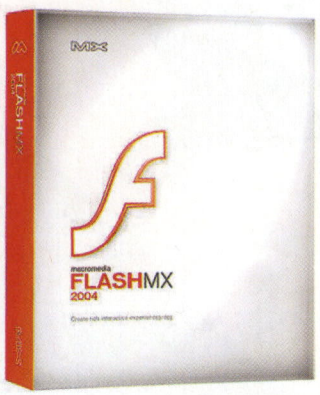
Not only does this streamline your bandwidth-hogging DV formats using effective web optimisation techniques through Sorensen compression, but it also converts your footage into a format that can be embedded efficiently into a *Flash* native SWF file for online delivery. The kit also includes extensions to the related *Dreamweaver* title so you don't need to be a web guru to get your work online.

Price £579
Manufacturer Macromedia
[t] 01264 326 384
[w] www.macromedia.com

arts projects verdict

★★★½☆

In brief: The video kit will only work with *Flash MX Pro 2004*, making it a pretty expensive purchase for the occasional web-deliverable conversion.



Apple Motion 2

The new kid on the block has more than a few tricks up its sleeve to keep the old dog *After Effects* on its toes...

When Adobe made the fateful decision to discontinue the Mac build of *Premiere*, a mass of former users were forced to find alternative software. The natural choice was Apple's own *Final Cut Pro*, which many old-school *Premiere* users were surprised to find was just as capable as their previous video-editing solution. And Apple was quick to pick up on this mass exodus and quickly put development time into winning over more users by tempting them further with its own motion graphics title.

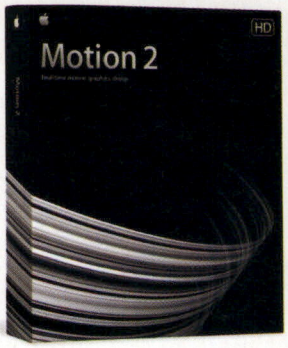
As *Motion 2* hits the shelves, the software (at a fraction of the price of *After Effects*) is proving popular: it offers powerful animation, effects and natural integration with not just related Apple products but also the more established competition in the Adobe camp. The new version introduces a raft of new features, but most impressive are the speed enhancements when used through OS X Tiger.

Price £199
Manufacturer Apple
[t] 0800 0391 010
[w] www.apple.com

arts projects verdict

★★★★☆

In brief: *Motion 2* is modest enough to stay respectful to *After Effects*, but as more Mac users turn to Apple software, there could be some interesting developments afoot. ca-p



CODEC
FILMSTRIP
KEYFRAME
LUMINANCE
NTERLACE
NTSC

[Illustration] Viagrafik [w] www.viagrafik.com

Motion graphics glossary

Cut these pages out, and keep this handy guide to the most common motion graphics terms close to your desk at all times...

1D values
1D values refers to layer properties that are described with only one value. This includes opacity – you would only specify one opacity level, from 0 to 100 per cent.

2D values
2D values are layer properties that are described with two values, such as position or scale. Scale has two values – horizontal and vertical – as does position (at least in 2D environments).

3D values
When using position or scale in a 3D layer, it becomes a 3D value. Think of the position on an X, Y and Z axis – an object can move left, right, back and forth, thus having three values in total.

4D values
4D values refer to colour values composed of RGBA (or in other words Red, Green, Blue and Alpha – see alpha channel).

A

Adjustment layer
An adjustment layer is a layer that holds effects applied to all layers below it in the Layers palette. Adjustment layers are a great way of applying effects without destroying pixels.

After Effects
Adobe's industry-standard motion graphics tool, used by broadcast houses and motion artists all around the world. It's currently on version 6.5 and available for both Mac and PC. See [w] www.adobe.com/aftereffects for more and check out the range of tutorials in this magazine.

Alpha channel
Otherwise known as a mask, an alpha channel is an 8-bit channel (usually) that is used to store transparency information. Only certain file formats support alpha channels.

Anchor point
The point which, in a motion graphics or compositing application, acts as a centre point for scaling or rotation.

Aspect ratio
The ratio between the height and width of the picture. Typical aspect ratios are 4:3 (standard TV) and 16:9 (widescreen).

B

Bézier
The method of drawing paths, using points and anchors, invented by Pierre Bézier in the 1970s. Bézier curves can be used to draw motion paths, defining the movement of an object.

Broadcast-safe
Simply put, making your project broadcast safe will mean there is no colour distortion when played on television. Most motion graphics apps and NLEs have effects filters for automatically making your projects broadcast-safe.

C

Cache
In *After Effects*, *Combustion*, *Motion* and other motion and non-linear editing (NLE) apps, the cache refers to stored rendered frames, meaning you can play them back without re-rendering.

Child layer
A layer that depends on the layer it is linked to: the parent layer. The child layer inherits all the transformations applied to the parent layer.

CODEC
Standing for Compression/Decompression, a CODEC is an algorithm used for compressing video footage. Some of the most popular video CODECS are MPEG, MOV and DivX.

Combustion
Autodesk's mid-range motion graphics and compositing application, taking its main toolset from its higher-end, industry-standard compositing and graphics tools, *Flame* and *Inferno*.

Composition
A project combining different pieces of footage with effects, music and other elements in *After Effects*.

Compositing
The process of seamlessly combining one piece of footage with another (or another element – maybe CG). *After Effects* supports a number of 3D formats, as well as alpha channels and clipping paths to aid in compositing. It also has good keying tools for removing unwanted backgrounds and blue screens.

Coordinates
In *After Effects*, the coordinates of a layer or object on a layer (as you would expect) refer to its position in space: horizontal, vertical and depth.

D

Depth of field
A camera setting in *After Effects* and other motion apps that simulates the natural blur of a real camera.

DivX
A relatively new CODEC giving a pretty good quality-to-file-size ratio. It's available free for both Mac and PC from **[w]** www.divx.com.

Draft
A quality setting in *After Effects* enabling you to work with a draft quality preview of your footage, thus speeding up working times. Especially good if you're working on an older computer.

DV
Digital Video – the standard digital video format.

DVD Studio Pro
Apple's now industry standard tool for creating DVDs. The latest version includes support for HD video and has a native Dolby Digital 5.1 encoder. See **[w]** www.apple.com/uk/dvdstudiopro for more.

E

Ease in/out
A feature of most motion graphics and video applications, enabling you to add finesse to your animations. Basically, Ease in/out smoothes out keyframes, creating a more natural animation.

Effects
Effects in motion graphics applications are just like filters applied in *Photoshop*, only to a moving image. Effects can also be keyframed to change over time.

Expression
An Expression is a relatively new technology in *After Effects* enabling you to animate objects over time without using keyframes.

F

FCP
Otherwise known as *Final Cut Pro*, *FCP* is Apple's NLE , which has taken the motion and video world by storm. Relatively cheap and extremely powerful, *FCP* is now being used on many Hollywood blockbusters. Version 5 includes improved HD support and great multi-camera editing features. See **[w]** www.apple.com/uk/finalcutpro for more.

Feathering
The process of blurring the edge of an object or layer to seamlessly blend the layer with the layers beneath.

Filmstrip
A dated, yet still often used file format for exporting motion files as individual frames and editing them one by one in an image editor. This can be a handy format for rotoscoping footage.

Flash
Macromedia's (soon to be Adobe's) Web animation and motion graphics application. It's easy to use as an animation tool, but in recent years has been more focused towards web development. For more information see **[w]** www.macromedia.com.

Footage
Any moving images you import to use in your motion projects – including DV, MOV, DivX or any other movie CODEC.

fps (frames per second)
A speed measurement based on the number of frames that are displayed per second in your project. The standard for PAL is 25fps, while the standard for NTSC is 29.97.

Frame
A single image in a project or composition.

Frame rate
The number of frames displayed per second in your composition or project.

G

Gamut
The range of colours that can be reproduced using Red, Green and Blue.

H

HD
HD (High Definition) video is the equipment that manufacturers and broadcasters would like us to move up to next. It offers 1,280x720 or 1,920x1080 resolution, but viewers will need an HD TV to play the results and nothing is currently being transmitted or marketed in that format. For more, see our Formats Demystified feature on page 64.

H.264
Apple's latest CODEC, delivering better quality for smaller file sizes. You will need *QuickTime 7* to view video footage encoded in this format, and as we go to press, *QT 7* is only available for Mac. See **[w]** www.apple.com/quicktime/technologies/h264/ for more information on this technology.

I

Import as composition
This feature in *After Effects* enables you to import a layered *Photoshop* or *Illustrator* document as a composition, with all layers intact and separately editable. Simply break apart your files in *Photoshop* or *Illustrator*, then animate the separate parts in *After Effects*.

In/out point
The points at which video footage starts and stops when placed on the timeline in any motion/NLE application. You usually specify the in/out points of each clip before you begin assembling your projects.

K

Key
A key is a tool used to extract one part of an image from another, often used when compositing two images (either moving or still) together.

Keyframe
A 'key' frame in your composition or timeline, this defines layer or object properties such as scale, position and so on. You use keyframes to define important points in your animation, and use tweening to construct the intermediate frames.

L

Layer
As in *Photoshop*, many motion graphics applications enable you to use layers in order to build up a 'stack' of footage and effects.

Lossless
Lossless refers to a form of compression that does not in any way degrade the quality of the video.

Lossy
The opposite of lossless, lossy is a form of compression that degrades the quality of the video when compressed.

M

Mask
See alpha channel. A mask is a selection, showing through an underlying object or layer to only reveal a specified part. Masks can be animated in *After Effects* and most other motion graphics and video applications.

Matte
A matte is a layer used to define another layer's transparency when there's no alpha channel. Video footage cannot have an alpha channel, but you can apply a matte to it.

Motion
Apple's new motion graphics tool (version 2 has just been released), capable of some pretty cool real-time effects. See **[w]** www.apple.com/uk/motion for more.

Motion blur
A process that simulates the natural blurring of moving objects. In *After Effects* it's very CPU and memory intensive, so use with care.

Motion path
A path (often Bézier) used to guide a layer or object from one position to another. Motion paths can work in 2D or 3D environments in *After Effects*.

N

NLE
Non Linear Editor. A modern method of editing video footage, in which you can get immediate access to many clips at once and assemble them on the timeline. Linear editing systems require you to rewind and fast forward to get to certain clips. Examples of software include Apple *Final Cut Pro*, Adobe *Premiere* and Sony *Vegas*.

NTSC
Stands for National Standards Television Committee. This is the name given to standard TV broadcasts in the US, Canada, Japan, Central America, parts of the Caribbean and South Africa.

Null
A null is an invisible object that carries certain properties and can be used to control other objects or layers.

P

PAL
Stands for Phase Alternating Line, this is the standard TV broadcast format used in Europe, Australia and much of the Middle East.

Parameter
The features of an effect that can be edited by the user in *After Effects*, and other motion graphics apps (usually using sliders or numerical entry).

Pre-comp
The process of creating a separate composition from one or more of your layers in *After Effects*.

Proxy file
A 'dummy' file, often a low-res version of your original footage, placed in your composition to save time when working on large projects. Handy if your PC or Mac isn't as quick as you'd like.

Q

QuickTime
Apple's standard media player, built into Mac OS, but also available for Windows. Enables the playback and, with the Pro version, the encoding of footage in many different CODECS.

R

RAM preview
A process in *After Effects* that writes a preview to RAM. This is used to quickly test the look and feel of a composition.

Realmedia
A streaming video format that can only be played using Realplayer. See **[w]** www.real.com for more details.

Real-time
In motion graphics terms, real-time means the ability to instantaneously see the effect of filters and other elements without rendering and re-rendering.

Rotoscoping
The process of drawing or painting over video footage to add hand-drawn animation effects.

S

Shake
A high-end compositing and motion graphics application from Apple, most notable for its use on *The Lord of the Rings* trilogy. See **[w]** www.apple.com/uk/shake.

SWF
The lightweight file format produced by Macromedia *Flash*.

T

Timeline
A standard palette in which you manage your keyframes and layers and apply effects and transformations over time.

Tweening
Tweening (or in-betweening) is simply an animation technique where movement between keyframes is generated by the computer.

W

Windows media
A streaming video format suitable for distributing content on the Web to the mass market. Every new Windows PC comes with Windows Media Player installed as standard.

X

X-axis
The horizontal axis in your motion graphics application.

X-value
An object or layer's position on the x-axis.

Y

Y-axis
The vertical axis in your motion graphics application.

Y-value
An object or layer's position on the y-axis.

Z

Z-axis
The depth axis in your application (if your app supports 3D cameras).

Z-value
An object or layer's position on the z-axis. ca-p

BRAND NEW WEBSITE!

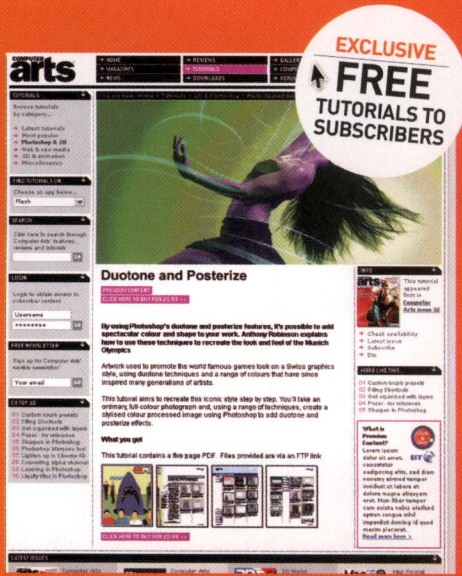
www.computerarts.co.uk

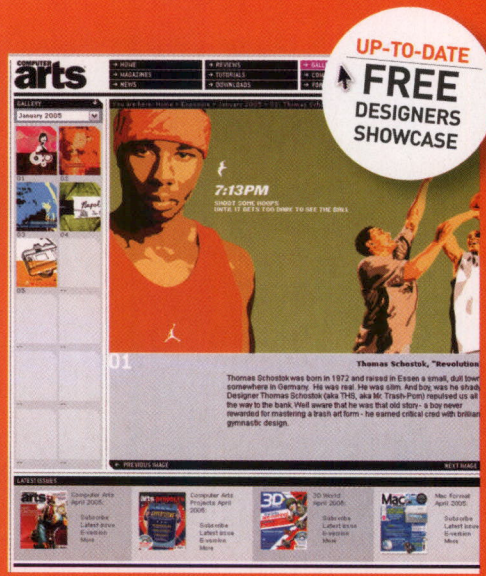
WHAT'S HAPPENED?

The *Computer Arts* website has undergone a radical makeover. Direct your browser to www.computerarts.co.uk and take a look. We've gone back to the drawing board to create an all-new online design portal, where you'll find the very best hardware and software reviews, downloadable tutorials, all the latest news from the creative industries, and much, much more.

The new-look site will not only feature exciting content from *Computer Arts* and *Computer Arts Projects*, but also sister magazines *Mac Format* and *3D World*, the latter providing superb resources for both animators and 3D modellers.

WHAT'S NEW?





→1 Free tutorials for subscribers
If you subscribe to the print version of *Computer Arts*, all online premium content is **free!** Simply register your details with us online and you'll receive a unique log-in that enables you to access our fully searchable database of tutorials. These expert how-tos normally cost between 99p and £2.50 each.

→2 Exposure gallery
Every month, we'll showcase the best in contemporary design in our extensive online gallery – the only place to see and be seen. So go on, submit your work and let your artistry be an inspiration to others. Who knows? You may even get an exciting commission out of it!

→3 Hundreds of searchable tutorials
If you want to know how to master a new digital creative technique, whether it's in *Photoshop* or *Illustrator*, web design, 3D or animation, you'll find what you're looking for in our new Tutorials section. We'll feature a selection of free tutorials to download and more in-depth premium tutorials, all in PDF format.

THE NEW DESIGN →

Make sure you log on to...
www.computerarts.co.uk

- **BRAND NEW NAVIGATION**
Access content from *Computer Arts, 3D World, Mac Format* and *Computer Arts Projects* from here

- **EXPOSURE GALLERY**
An extensive and impressive online gallery showcasing the best of contemporary design

- **HUNDREDS OF TUTORIALS**
Find any tutorial in no time at all with our powerful and handy website search facility

- **NEWS BLOG AREA**
Keep up-to-date with the latest product releases, events and cool design links, updated daily

- **MORE FEATURES**
Exclusive interviews, practical features, opinion columns and Q&As – it's all here and in depth

- **MORE NEWS & REVIEWS**
Up-to-the-minute news at your fingertips, plus top hardware and software reviews

CONTENT FROM...

- **CA PROJECTS**
Each issue of *Computer Arts Projects* gives you a detailed guide to a different creative subject. Recent issues have covered print and web design, *Photoshop* and how to start your own design business.

- **3D WORLD**
3D World is the only international magazine for 3D artists. Tutorials cover every major 3D software package, while in-depth articles showcase the work of industry-leading 3D companies.

- **MAC FORMAT**
The number one-selling consumer Mac magazine, full of practical and passionate advice. Each month, you can expect to find a range of expert tutorials, plus the best hardware and software reviews.

LOG ON NOW! WWW.COMPUTERARTS.CO.UK

NEXT ISSUE

COMPUTER arts projects

Illustration: Tim Warnock

All contents correct at time of going to press

BRAND NEW TUTORIALS, TIPS AND FEATURES

Everything you need to create stunning artwork, with tutorials from the industry's leading artists

On sale Thurs 23 June

COMING IN ISSUE 73:

EXCLUSIVE TUTORIALS: Over 30 pages of brand new digital art tutorials from industry experts

DESIGNER SECRETS: We interview the best digital artists out there and share their secrets with you

INSIDER FEATURES: We explore the design issues that matter to you and bring you invaluable advice at the same time!

Special offer

[w] www.digieffects.com

Upgrade and save!

Take advantage of our special upgrade offer to *CineLook 2* and save $100!

By now you should have sampled *CineLook 1.9* on the CD. This fully-working plug-in enables you to make your DV footage look like film, giving a professional edge to any motion or digital video project.

As well as bringing you this superb software (as sold for $695) we're also providing you with the chance to get your hands on the latest version of *CineLook* for a special price of $795 – that's $100 saving! You won't find this offer anywhere else. And why should you upgrade?

Well, for a start, *CineLook 2* is up to nine times faster than *CineLook 1.9*, meaning you won't have to worry about long rendering times when the client comes knocking at your door. Also, *CineLook 2* supports Apple *Motion* and *Final Cut Pro* as well as *After Effects*.

In addition, *Cinelook 2* supports unusual frame rates such as 10fps, 12fps and 16fps, supports both PAL and NTSC sources and now enables you to add RGB, Mono, HSV, CMYK or YUV grain.

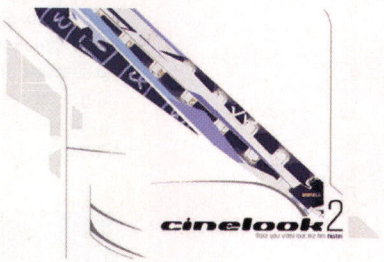
As if that wasn't enough, the Custom UI (user interface) now features a widescreen Preview mode, and a host of other improvements. The full list of filters included with *CineLook* is as follows:

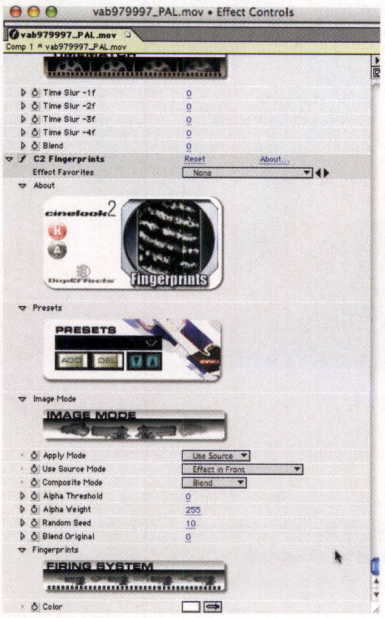
- AcidWash
- Adaptive Grain
- Banding Reducer
- Bleach Bypass
- Day for Night
- Film Flash
- Film Motion
- Fingerprints
- Gate Weave
- Grain Reducer
- Handwritten Text
- Letterbox
- Light Leaks
- SkinnyLook
- Soft Focus
- Solarize
- Vignette
- Film Damage

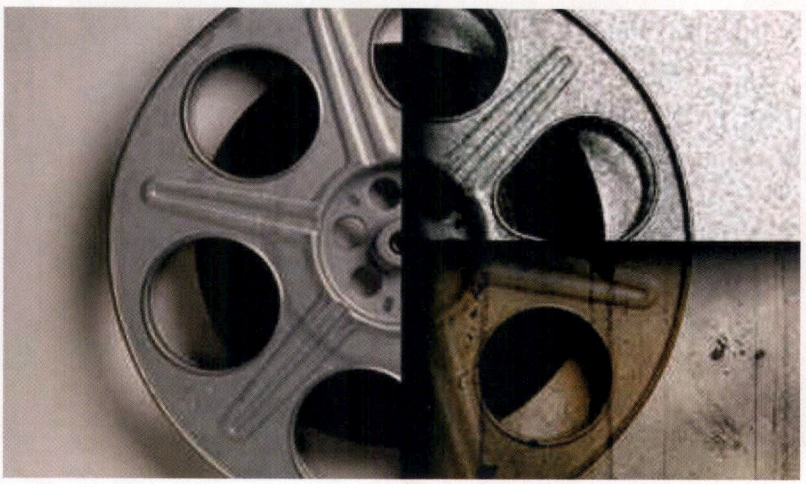
It's an amazingly powerful plug-in, and one that any motion artist or filmmaker should have in their arsenal. Just follow the steps below to get your $100 discount.

How to upgrade

To take advantage of this special offer simply go to Polar Graphics' website at [w] www.polar-graphics.com and fill out the Enquiry form, stating your wish to take advantage of the *Computer Arts Projects* magazine upgrade offer. Alternatively, call [t] +44 (0)20 8868 2479. ca-p







Upgrade to *CineLook 2* and you'll have a whole new set of film-look filters at your fingertips.

COMPUTER arts projects INTERACTIVE

CD HIGHLIGHTS

CineLook 1.9
A full version of the popular *After Effects* plug-in which enables you to simulate film in digital video. Worth $695, it's yours free!

Reelhouse footage
Los Angeles-based Reelhouse Royalty-Free Library has provided a sampler of videos including kinetics, 8mm effects and more.

DVfootageSource motion graphics
This selection of royalty-free videos contains a range of motion graphics effects for you to use in your projects.

Final Cut training
Video tutorials explaining a number of techniques on how to create motion effects in Apple's very own video-editing software suite.

Boris Red training
Find out how to use filters, create rendering effects and master the ability to manipulate interpolation and keyframes with these video tutorials.

Free film-look effects!

A full free product for making your video footage look like film...

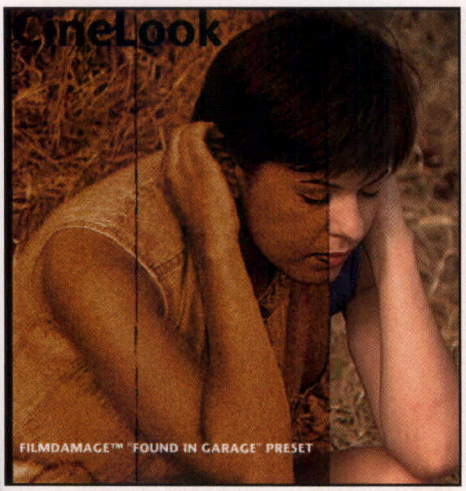
CineLook 1.9

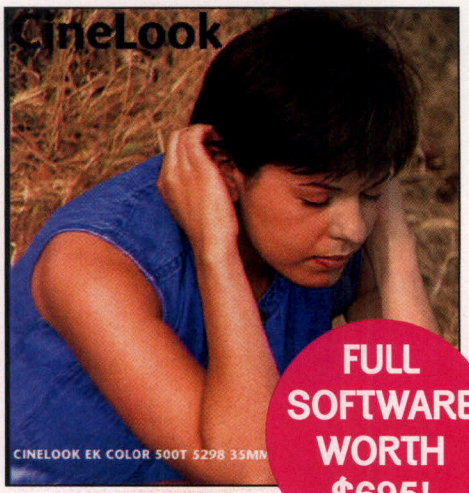
Make your video look like authentic film with this free *After Effects* plug-in...

This full version of the Broadcast edition of *CineLook 1.9* is a great tool for taking any video, computer animation, film scan or photo and adding grain and film artifacts such as dust, scratches, stains, hair and more.

CineLook enables you to simulate all of the popular film stocks and also perform advanced colour correction. It uses the enhanced timing controls in *After Effects* to convert 30fps footage to 24fps in order to simulate 35mm and 16mm film, and 12fps for 8mm film, a process which is known as 'inverse-telecine'. This Broadcast edition is limited to a resolution of 768x576 pixels (D1 NTSC & PAL).

Add varying amounts of noise and other effects to your footage.





FULL SOFTWARE WORTH $695!

More info...

Upgrade to *CineLook 2* for $795

DigiEffects is offering you a special discount of $100 when you purchase the full version of *CineLook 2*. To take advantage of the reduced price, you simply have to inform the company that you're a reader of *Computer Arts Projects*. See page 95 for the full upgrade details.

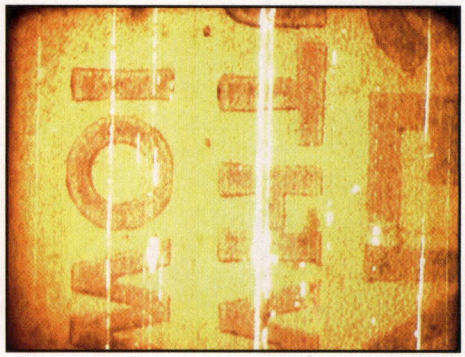
Note that you can also download presets from [w] www.digieffects.com/presets.shtml.

Quality stock video content

Give your movies a professional look using the free video footage on your CD...

Reelhouse has provided a sampler of its royalty-free videos from a number of its libraries, including timelapse, kinetics, 8mm masks and more. These products have been used for network identity, broadcast, commercials, feature film, corporate, presentation and multimedia. Reelhouse's full libraries include film effects, special effects, background animations, science, nature, scenic, urban, animal, retro and much more.

More royalty-free motion graphics content is provided by DVfootageSource. The animations on the disc are all loopable and about 10 to 20 seconds in length. On the company's main website you'll discover seamless loops, animated backgrounds, countdown leaders, animations and pre-animated *After Effects* projects.



More info... www.reelhouse.com, www.dvfootagesource.com

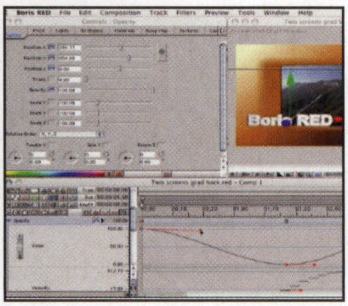
Video training

Improve your skills with this set of video tutorials...

Every month we bring you a selection of training videos to help you learn about different aspects of some of the software we feature in the issue. This month, we've got tutorials for *Final Cut Pro*, *After Effects* and *Boris Red*.

The *After Effects* tutorials are supplied by XtReMe-is-back.com and have been designed for versions 5.5 and 6 of *After Effects*, but they can also be used for the latest version.

Final Cut Pro training comes courtesy of Ripple Training and covers alpha matting, time remapping and nudging. Finally, the *Boris Red* training covers the last three areas of the retail training DVD from Boris FX.



More info... www.borisfx.com, www.xtreme-is-back.com, www.rippletraining.com

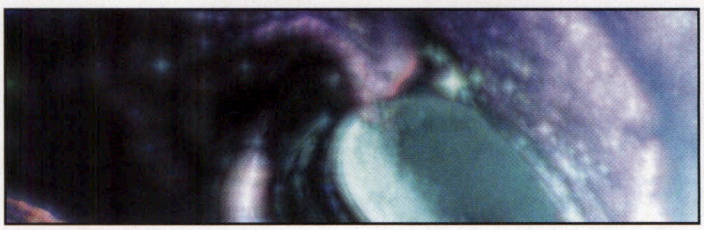
Filter and plug-in toolkit

Expand the creative power of your motion graphics software...

These great plug-ins and filters have been created to make your life easier when it comes to tackling complex tasks in the motion graphics arena. Our pick of the bunch is *Anarchy Toolbox* from Digital Anarchy, a set of nine tools which will enable you to create a variety of sophisticated effects. These visuals include creative blurs, beautiful glows, controlled distortions, seamlessly tiled images and warped graphics.

Flair by frischluft.com is also incredibly useful, bringing eight high-quality effects to Adobe *After Effects* and *Photoshop*-compatible programs. Among these are shine, glow and sparkle effects, all with 16-bit and multi-CPU support.

Alien Skin Software's well-known *Eye Candy* has been given a revamp and is available for *After Effects* users as well as its now vast *Photoshop* following. This tool assists in sophisticated texture production and distortion, enabling you to create dazzling organic effects. ca-p



More info... www.digitalanarchy.com, www.frischluft.com, www.alienskin.com

On the CD...

Full contents on page 96

Full product

· *CineLook 1.9*

Showcase movies

· Nine showreels and clips from motion graphics artists

Resources

· Reelhouse footage

· Royalty-free motion graphics from DVfootageSource

Plug-in demos

· *LayerLink, Eye Candy* for *After Effects, Flair, Shade Shape, Anarchy Toolbox, Au Naturel, DIN, Primatte Keyer, Depth Cue*

Video training

· *After Effects* tutorials from XtReMe-is-back.com

· *Final Cut Pro* training from Ripple

· *Boris Red* training from Boris FX

· 'Build a Blue Screen' tutorial

iStockphoto™

I love my image.

$1 LO-RES	$2 MED-RES	$3 HI-RES

280,000+ royalty-free images.
6,000 new images each week.
No subscription fees – ever. Free to join.

Image #371249: *Red Hot*
Amanda Rohde, Australia (exclusive to iStock)
istockphoto.com/hidesy

www.istockphoto.com

HOT DEALS

FREE DOMAIN NAME

with every new web hosting account from £4.99 pcm*

EUROPEAN DOMAIN NAME SPECIALISTS

including .com .net .org .biz and .info

CHOOSE FROM OVER 50 DOMAINS

from **£4.99** per annum

- ✔ Protect brands and trademarks
- ✔ Powerful online control panel
- ✔ FREE email and web forwarding
- ✔ FREE web-site creator

QUALITY EMAIL PLANS

Turn your domain into feature packed POP3 email addresses for the family or office.

SUPERIOR VIRUS & SPAM PROTECTION

- ✔ Choose from 4 plans
- ✔ 2 - 50 POP3 boxes
- ✔ 50 - 750MB storage
- ✔ Unlimited forwarding
- ✔ Advanced webmail

from **£1.49** per month

#1 Unix Hosting — WEBHOST DIRECTORY AWARD WINNER

#1 Budget Hosting — WEBHOST DIRECTORY AWARD WINNER

AWARD WINNING WEB HOSTING

FREE SET-UP - NO CONTRACT
FREE DOMAIN NAME*
FREE ADVANCED WEB-TOOLS

from **£4.99** per month

SUPERIOR IN-HOUSE SUPPORT

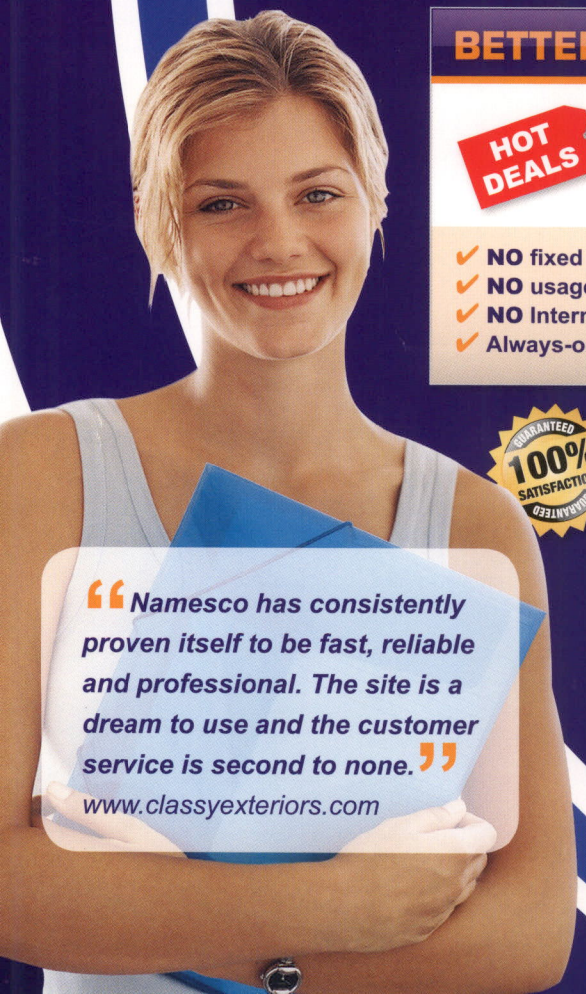
All-inclusive pricing includes:

- ✔ Comprehensive control panel
- ✔ FREE expert advice and support
- ✔ Powerful web-based email
- ✔ Instant activation
- ✔ Multiple daily backups
- ✔ Virus and spam protection
- ✔ Powered by Namesco's Network

+ Packages include E-commerce, PHP, ASP, SSL, MySQL and Frontpage extensions

FEATURE RICH HOSTING

PACKAGE	SPACE	POP3	B/W	PCM
StartUp	100MB	5	2GB	£4.99
StartUp+	200MB	10	5GB	£7.99
Business	500MB	25	10GB	£13.99
Business+	700MB	50	15GB	£16.99
Enterprise	1GB	100	20GB	£21.99
Enterprise+	1.5GB	200	30GB	£24.99



BETTER BROADBAND

HOT DEALS

FREE CONNECTION†
FREE DOMAIN NAME*
FREE ANNUAL HOSTING

- ✔ **NO** fixed contract
- ✔ **NO** usage restrictions
- ✔ **NO** Internet call charges
- ✔ Always-on connection

from **£19.99** per month

LOWER PRICES

GREAT VALUE BROADBAND

PACKAGE	SPEED	CONTENTION	PCM
Home500	512Kbps	50:1	£19.99
Home1000	1Mbps	50:1	£26.99
Home2000	2Mbps	50:1	£34.99
Office500	512Kbps	20:1	£28.99
Office1000	1Mbps	20:1	£44.99
Office2000	2Mbps	20:1	£54.99

GUARANTEED 100% SATISFACTION GUARANTEED

Total Peace of Mind - Not only will your services benefit from 24/7 network monitoring and daily backups, they will be hosted on our super fast and secure Linux server cluster. Located at Telehouse (London), the largest and most successful Network Operation Centre (NOC) in Europe, your site will benefit from being situated directly on the Internet backbone and the home of the London Internet Exchange (LINX), ensuring accelerated communications, total efficiency and security.

"Namesco has consistently proven itself to be fast, reliable and professional. The site is a dream to use and the customer service is second to none."
www.classyexteriors.com

www.names.co.uk | sales@names.co.uk

Call us on 0870 120 8888

NAMESCO LIMITED
WWW.NAMES.CO.UK

Namesco Limited. Est. 1996. Acton House, Perdiswell Park, Worcester. WR3 7GD
Prices quoted exclude VAT at 17.5%. Cheques and major credit/debit cards accepted.
*Offer applies to .co.uk, .me.uk and .org.uk domains only. †Offer applies to Office broadband only.